

# TOYOTA

## Application For Certification - Part 1 2027 Model Year

**Durability Group** : VTYXHHGNNB2J  
**Evap/refueling Families** : VTYXR0170J62  
**Test Group** : VTYXT02.4E4A  
**Durability Group Description** : Four Stroke, Otto Cycle, Gasoline Fueled, Ported FI,  
Catalyst code: 3-IIr9+3-IIIs1  
**Test Group Description** : 2.4 Liter I4 LDT4  
**Applicable Standards** : Federal State: Interim Tier 4 - Bin 50 - LDT4  
California: LEVIV - ULEV 50 - LDT2  
**Carlines Covered** : LAND CRUISER  
**Engine Series** : T24A-FTS  
**Vehicles Tested** :

Vehicle I.D.	Config.	Test	Test Number
24-TH1H	00	FTP	RTYX10082630
24-TH1H	00	HWY	RTYX10082653
24-TH1H	01	SFTP (US06)	RTYX10082648
24-TH1H	00	SFTP (SC03)	RTYX10082655
24-TH1H	00	C.CO, C.HC	RTYX10082645
24-TN2H	00	EVAP	RTYX10084963, RTYX10085261
24-TN2H	00	Running Loss	RTYX10085258
24-TN2H	00	Refueling	RTYX10085031

**EPA Response Requested By : March 13, 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 : VTYXHHGNNB2J

Please refer to the common file for details.

3. **Evaporative/Refueling Family Description**

Evaporative/Refueling Family Name : VTYXR0170J62

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 : VTYXT02.4E4A
- 5.2 Engine displacements covered : 2,393 cm3 (146.0 CID)
- 5.3 Arrangement and number of cylinders : I4
- 5.4 Vehicle class (es) covered : LDT4
- 5.5 Federal emission standards class : Interim Tier 4 - Bin50 - LDT4
- 5.6 California emission standards class : LEV IV - ULEV50 - LDT2

5.7 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 24MY LAND CRUISER is the representative DDV in this Durability Group.

**EDV**: Utilizing good engineering judgement that considered vehicle curb weight, road load coefficients, catalyst heat stress, we judged 24MY LAND CRUISER is the worst case and representative EDV in this Test Group.

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

**Certification Summary Information Report**

<b>Manufacturer</b>	Toyota Motor Corporation	<b>Manufacturer Code</b>	TYX
<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Certificate Number</b>	--	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	--	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	--	<b>Conditional Certificate</b>	--
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	01/06/2026 01:29:06 AM
<b>Model Year</b>	2027		

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test Group Information</b>			
<b>CSI Type</b>	New	<b>Running Change Reference Number</b>	--
<b>GHG Exempt Status</b>	Not Exempt		
<b>Drive Sources and Fuel(s)</b>			
<b>Drive Source #1:</b>	Combustion Engine		
	<b>Fuel</b>	<b>Basic Fuel Metering System</b>	<b>Lean Burn Strategy Indicator</b>
	Gasoline	Spark Ignition direct & ported injection	No
<b>Drive Source #2:</b>	Electric Motor		
	<b>Fuel</b>	<b>Basic Fuel Metering System</b>	<b>Lean Burn Strategy Indicator</b>
	Electricity	--	No
<b>Hybrid Indicator</b>	Yes		
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	Yes
<b>Multiple Fuel Combustion</b>	--	<b>Off-board Charge Capable Indicator</b>	No
<b>Fuel Cell Indicator</b>	No	<b>EPA Vehicle Class</b>	LDT4
<b>Federal Clean Fuel Vehicle</b>	No	<b>Federal Clean Fuel Vehicle Standard</b>	--
<b>Federal Clean Fuel Vehicle ILEV</b>	No	<b>California Partial Zero Emissions Vehicle Indicator</b>	No
<b>Durability Group Name</b>	VTYXHHGNNB2J	<b>Durability Group Equivalency Factor</b>	0.9
<b>Reduced Fee Test Group</b>	No	<b>Certification Region Code(s)</b>	FA, CA
<b>Complies with HD GHG 2b/3 regulations?</b>	No		
<b>Introduction into Commerce Date</b>	--	<b>CAP2000 Conditional Certificate?</b>	N/A
<b>Independent Commercial Importer?</b>	--	<b>Alternative Fuel Converter Certificate?</b>	--
<b>SFTP Federal Composite Compliance Identifier</b>	Tier 3	<b>SFTP Tier 2 Composite CO Option</b>	No
<b>SFTP LEV-III Composite Compliance Indicator</b>	Yes		
<b>OBD Compliance Type</b>	CARB	<b>OBD Demonstration Vehicle Test Group</b>	VTYXT02.4H3A
<b>Test Group OBD Compliance Level</b>	Full - no deficiencies	<b>Number of Test Group OBD Deficiencies</b>	0
<b>OBD Deficiencies Comments</b>	--		
<b>Mfr Test Group Comments</b>	--		
<b>Mfr Exhaust / Evap Standards Comments</b>	--		

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A		<b>Evaporative/Refueling Family</b>	VTYXR0170J62			
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	01/06/2026 01:20:14 AM				
<b>Integrated ORVR?</b>	No	<b>Fuel(s)</b>	Gasoline, Electricity				
<b>Multiple Fuel Storage</b>	Fuels Stored Together						
<b>Bladder Fuel Tank?</b>	No						
<b>Fuel Tank Material</b>	Plastic	<b>Fuel Tank Material Description</b>	EVOH				
<b>Fill Pipe Seal Type</b>	Liquid seal						
<b>Air Intake System Vapor Storage Device?</b>	No	<b>Air Intake System Vapor Storage Device Description</b>	--				
<b>Fuel System Vapor Storage Canister?</b>	Yes	<b>Other Vapor Storage</b>	--				
<b>Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)</b>	170	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	--				
<b>Mfr Evaporative/Refueling Family Comments</b>	--						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	No						
<b>Canister Bleed Test Indicator</b>	No	<b>Applicability of Evaporative Canister Bleed Test</b>	--				
<b>Evaporative Canister Bleed Test Comments</b>	--						
<b>CARB Fuel Only (Rig) Test Indicator</b>	No	<b>Applicability of CARB Fuel Only (Rig) Test</b>	--				
<b>CARB Fuel Only (Rig) Test Comments</b>	--						
<b>Models Covered by this Certificate</b>							
<b>Carline Manufacturer</b>	<b>Division</b>	<b>Carline</b>	<b>Certification Region Code(s)</b>	<b>Drive System</b>	<b>Trans - Type</b>	<b>- # of Gears</b>	<b>Trans - Lockup</b>
Toyota Motor Corporation	1 - TOYOTA	120 - LAND CRUISER	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	8	Yes
Toyota Motor Corporation	1 - TOYOTA	120 - LAND CRUISER	Federal	4-Wheel Drive	Semi-Automatic	8	Yes
<b>Engine Description</b>							
<b>Hybrid Type</b>	IC Engine/Electric Motor			<b>Hybrid Description</b>	--		
<b>Engine Type</b>	4-Stroke Spark Ignition			<b>Mfr Engine Description</b>	--		
<b>Engine Block Arrangement</b>	Inline			<b>Mfr Engine Block Arrangement Description</b>	--		
<b>Camless Valvetrain Indicator</b>	No			<b>Oil Viscosity/Classification</b>	0W-20		
<b>Number of Cylinders/Rotors</b>	4			<b>Mechanically Variable Compression Ratio Indicator</b>	N		

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A				<b>Evaporative/Refueling Family</b>			VTYXR0170J62															
<b>After Treatment Device(s) (ATD)</b>																							
<b>ATD Number</b>		<b>ATD Type</b>		<b>ATD Precious Metal</b>		<b>Substrate Material</b>		<b>Substrate Construction</b>															
1		Three-way catalyst		Palladium + Rhodium		Ceramic		Monolith															
2		Three-way catalyst		Platinum + Rhodium		Ceramic		Monolith															
<b>Mfr After Treatment Device (ATD) Comments</b>																							
--																							
<b>Direct Ozone Reduction (DOR) Device</b>																							
Not Equipped																							
<b>Mfr Emission Control Device Comments</b>																							
--																							
<b>Engine Configuration Number 1</b>																							
<b>Engine Displacement (liters)</b>		2.4		<b>Engine Rated Horsepower</b>			278																
<b>Number of Inlet Valves Per Cylinder</b>		2		<b>Number of Exhaust Valves Per Cylinder</b>			2																
<b>Air Aspiration Method</b>		Turbocharged		<b>Number of Air Aspiration Devices</b>			1																
<b>Air Aspiration Device Configuration</b>		Single		<b>Charge Air Cooler Type</b>			Air																
<b>Air Aspiration Drive Method(s)</b>		Mechanical																					
<b>Cylinder Deactivation</b>		No																					
<b>Cylinder Deactivation Description</b>		--																					
<b>Variable Valve Timing</b>		Yes																					
<b>Variable Valve Timing System Description</b>		Intake and exhaust																					
<b>Variable Valve Lift?</b>		No																					
<b>Variable Valve Lift System Description</b>		--																					
<b>Number of Knock Sensors</b>		1		<b>Number of Air/Fuel Sensors</b>			2																
<b>Air/Fuel Sensor # 1 Type</b>		Heated air fuel		<b>Air/Fuel Sensor # 1 Description</b>			--																
<b>Air/Fuel Sensor # 2 Type</b>		Heated air fuel		<b>Air/Fuel Sensor # 2 Description</b>			--																
<b>Mfr Air/Fuel Sensor Comments</b>		--																					
<b>Exhaust Gas Recirculation</b>		No		<b>Cooled Exhaust Gas Recirculation</b>			No																
<b>EGR Type</b>		--		<b>Exhaust Gas Recirculation Description if 'Other'</b>			--																
<b>Closed Loop Air Injection System</b>		No																					
<b>Air Injection Type</b>		Not Applicable		<b>Air Injection Type if 'Other'</b>			--																
<b>Mfr Engine Configuration Comments</b>		--																					
<b>Official Test Numbers</b>																							
<b>Test Group</b>		<b>Fuel</b>		<b>FTP</b>		<b>US06</b>		<b>SC03</b>		<b>Cold CO</b>		<b>Highway</b>		<b>EPA City Litmus Value</b>		<b>EPA City Litmus Threshold</b>		<b>EPA Highway Litmus Value</b>		<b>EPA Highway Litmus Threshold</b>		<b>CREE Weighting Factor</b>	
Gasoline		RTYX10082630		RTYX10082630		RTYX10082648		RTYX10082655		RTYX10082645		RTYX10082653		999.9		228.2		999.9		286.1		--	
Electricity		RTYX10082630		RTYX10082630		RTYX10082648		RTYX10082655		RTYX10082645		RTYX10082653		--		--		--		--		--	

## Certification Summary Information Report

Test Group	VTYXT02.4E4A		Evaporative/Refueling Family	VTYXR0170J62
<b>SFTP LEV-III Official Test Numbers</b>				
Test Group Fuel	FTP	US06	SC03	
Gasoline	RTYX10082630	RTYX10082648	RTYX10082655	
Electricity	RTYX10082630	RTYX10082648	RTYX10082655	
<b>Hybrid Electric Vehicle And Fuel Cell Information</b>				
<b>Rechargeable Energy Storage System</b>	Battery(s)	<b>Rechargeable Energy Storage System, if Other</b>	--	
<b>Battery Type</b>	NiMH	<b>Number of Battery Packs</b>	1	
<b>Total Voltage of Battery Packs</b>	288	<b>Battery Energy Capacity</b>	6.5	
<b>Battery Specific Energy</b>	33	<b>Battery Charger Type</b>	On-Board	
<b>Number of Capacitors</b>	--	<b>Capacitor Rating (In Farads)</b>	--	
<b>Mfr Capacitor Comments</b>	--			
<b>Hydraulic System Description</b>	--			
<b>Regenerative Braking Type</b>	Electrical Regen Brake			
<b>Regenerative Braking Source</b>	Both	<b>Driver Controlled Regenerative Braking</b>	No	
<b>Mfr Regenerative Braking Description</b>	--			
<b>Drive Motor(s)/Generator(s)</b>	1			
<b>Motor/Generator Type 1</b>	AC SYNCHRONOUS	<b>Rated Motor/Generator Power</b>	36	
<b>Mfr Fuel Cell Description</b>	--			
<b>Fuel Cell On-Board H2 Storage Capacity (kg)</b>	--	<b>Usable H2 Fill Capacity (kg)</b>	--	
<b>Mfr Hybrid Electric/ Electric Vehicle Comments</b>	--			



## Certification Summary Information Report

Test Group		VTYXT02.4E4A			Evaporative/Refueling Family			VTYXR0170J62
<b>Dynamometer Coefficients:</b>								
		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	38.862	0.51435	0.030549	20.136	-0.22075	0.03602	18.8	
Cold CO	42.748	0.56579	0.033604	20.987	-0.1238	0.035281	N/A	
US06	38.716	0.51312	0.030985	20.005	-0.15547	0.036037	N/A	
Emission Control Device Comments	--							
Manufacturer Test Vehicle Comments	Drive mode is SPORT. Conducted City, Hwy, SC03 and Cold tests.							

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10082630</b>	<b>Test Procedure</b>	<b>21 - Federal fuel 2-day exhaust (w/can load)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	09/12/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2E3-02	<b>Fuel Calibration Number</b>	3
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Corporation		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4061	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	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
CO2 BAG 4 (Bag 4 Carbon Dioxide)	0	--
FE BAG 4 (Bag 4 Fuel Economy)	999	999
METHANE (CH4 - Methane)	0.0038666	--
CO (Carbon Monoxide)	0.3444846	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.71	--
DT-EER (Drive Trace Energy Economy Rating)	0.33	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0015559	--
N2O (Nitrous Oxide)	0.0002756	--
HC-NM (Non-methane Hydrocarbon)	0.0081016	--
NMOG (Non-methane organic gases)	0.0089215	--
PM (Particulate Matter)	0.0004959	--
HC-TOTAL (Total Hydrocarbon)	0.011447	--

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	Evaporative/Refueling Family	VTYXR0170J62
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CREE/OPT-CREE</b>
Carbon-Related Exhaust Emissions	0	999

<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	0	--

**Manufacturer Test Comments** NMOG = HC-NM x 1.1012

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	0.34	--	--	--	0.02	--	0.4	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.31	--	--	--	0.02	--	0.3	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	999	--	--	--	0.041	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0039	--	--	--	0.0113	--	0.015	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0003	--	--	--	0.0008	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0089	1	1.10	--	0.0107	--	0.020	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0105	1	1.10	--	--	--	0.028	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0310	1	1.03	--	0.0173	--	0.031	0.060	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0016	--	--	--	0.0066	--	0.008	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	0.34	--	--	--	0.02	--	0.4	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0089	1	1.10	--	0.0107	--	0.020	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0105	1	1.10	--	--	--	0.028	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0016	--	--	--	0.0066	--	0.008	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

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10082645</b>	<b>Test Procedure</b>	<b>11 - Cold CO</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	29 - Cold CO E10 Premium Gasoline (Tier 3)
<b>Test Date</b>	08/29/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2M0A01	<b>Fuel Calibration Number</b>	30
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Corporation		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3916	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	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
CO2 BAG 4 (Bag 4 Carbon Dioxide)	0	--
METHANE (CH4 - Methane)	0.0172953	--
CO (Carbon Monoxide)	0.6750893	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.84	--
DT-EER (Drive Trace Energy Economy Rating)	0.11	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.97	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0051244	--
N2O (Nitrous Oxide)	0.0169541	--
HC-NM (Non-methane Hydrocarbon)	0.0982057	--
HC-TOTAL (Total Hydrocarbon)	0.1154194	--

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

### Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	0	--

**Manufacturer Test Comments**                    --

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	50,000 miles	Federal Tier 3 Bin 50	CO	0.68	--	--	--	0.00	--	0.7	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 50	HC-NM	0.10	--	--	--	0.01	--	0.1	0.5	Pass
CA	50,000 miles	California LEV-IV ULEV50	CO	0.68	--	--	--	0.00	--	0.7	12.5	Pass

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10082653</b>	<b>Test Procedure</b>	<b>3 - HWFE</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	09/08/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2E3-02	<b>Fuel Calibration Number</b>	3
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Corporation		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4017	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0021727	--
CO (Carbon Monoxide)	0.1180902	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.11	--
DT-EER (Drive Trace Energy Economy Rating)	0.02	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.14	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0057808	--
N2O (Nitrous Oxide)	0.0006654	--
HC-NM (Non-methane Hydrocarbon)	0.0004778	--
NMOG (Non-methane organic gases)	0.0004921	--
HC-TOTAL (Total Hydrocarbon)	0.0024777	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	0	999

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		VTYXT02.4E4A				Evaporative/Refueling Family				VTYXR0170J62		
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	--	--	--	0.041	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0005	1	1.03	--	0.0107	--	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0063	1	1.03	--	--	--	0.024	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0058	--	--	--	0.0066	--	0.012	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0005	1	1.03	--	0.0107	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0063	1	1.03	--	--	--	0.024	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0058	--	--	--	0.0066	--	0.012	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

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10082655</b>	<b>Test Procedure</b>	<b>95 - SC03</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	08/29/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2E3-02	<b>Fuel Calibration Number</b>	2
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Corporation		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	3946	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	Yes

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0028858	--
CO (Carbon Monoxide)	0.0851862	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.08	--
DT-EER (Drive Trace Energy Economy Rating)	0.27	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.3	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0136605	--
N2O (Nitrous Oxide)	0.0122678	--
HC-NM (Non-methane Hydrocarbon)	0.0041259	--
NMOG (Non-methane organic gases)	0.0042497	--
HC-TOTAL (Total Hydrocarbon)	0.0072344	--

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		VTYXT02.4E4A				Evaporative/Refueling Family				VTYXR0170J62		
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	0.09	--	--	--	0.02	--	0.1	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0042	1	1.10	--	0.0107	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0179	--	--	--	--	--	0.035	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0137	--	--	--	0.0066	--	0.020	999.999	Pass

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62									
<b>Emission Data Vehicle Information</b>												
<b>Vehicle ID / Configuration</b>	24-TH1H / 1	<b>Manufacturer Vehicle Configuration Number</b>	1									
<b>Original Test Group Name</b>	RTYXT02.4N43	<b>Original Evaporative/Refueling Family</b>	RTYXR0170J92									
<b>Original Test Vehicle Model Year</b>	2024											
<b>Vehicle Model</b>												
<b>Represented Test Vehicle Make</b>	TOYOTA	<b>Represented Test Vehicle Model</b>	LAND CRUISER									
<b>Leak Family Details</b>												
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--									
<b>Drive Sources and Fuel System Details</b>												
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> <tr> <td>2</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	2	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel										
1	Combustion Engine	Gasoline										
2	Electric Motor	Electricity										
<b>Hybrid Indicator</b>	Yes											
<b>Multiple Fuel Storage</b>	--	<b>Multiple Fuel Combustion</b>	--									
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System Indicator</b>	Yes									
<b>Rechargeable Energy Storage System</b>	Battery(s)	<b>Rechargeable Energy Storage System, if 'Other'</b>	--									
<b>Off-board charge Capable Indicator</b>	No											
<b>Odometer Correction -- Initial</b>	8	<b>Odometer Correction Factor</b>	1									
<b>Odometer Correction Sign</b>	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor											
<b>Odometer Correction Units</b>	Miles											
<b>Engine Code</b>	01	<b>Rated Horsepower</b>	278									
<b>Displacement (liters)</b>	2.393											
<b>Air Aspiration Method</b>	Turbocharged	<b>Air Aspiration Method, if 'Other'</b>										
<b>Number of Air Aspiration Devices</b>	1	<b>Air Aspiration Device Configuration</b>	Single									
<b>Charge Air Cooler Type</b>	Air	<b>Drive Mode While Testing</b>	2-Wheel Drive, Rear									
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Aged Emission Components</b>	4,000 (mi)									
<b>Curb Weight (lbs)</b>	5450	<b>Equivalent Test Weight (pounds)</b>	5500									
<b>GVWR (lbs)</b>	6835	<b>N/V Ratio</b>	25.2									
<b>Axle Ratio</b>	3.58											
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	8									
<b>Transmission Lockup</b>	Yes	<b>Creeper Gear</b>	No									

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
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**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
<b>City/Highway/Evap</b>	38.862	0.51435	0.030549	20.136	-0.22075	0.03602	18.8
<b>US06</b>	38.716	0.51312	0.030985	20.005	-0.15547	0.036037	N/A

**Emission Control Device Comments**

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**Manufacturer Test Vehicle Comments**

Drive mode is SPORT. Conducted US06 test only.

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10082648</b>	<b>Test Procedure</b>	<b>90 - US06</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	09/13/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	2F3-03	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Corporation		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4092	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	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)	0.0026564	--
CO (Carbon Monoxide)	0.492356	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.67	--
DT-EER (Drive Trace Energy Economy Rating)	-0.23	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.28	--
MFR FE (Manufacturer Fuel Economy)	999	999
NOX (Nitrogen Oxide)	0.0067734	--
N2O (Nitrous Oxide)	0.0009077	--
HC-NM (Non-methane Hydrocarbon)	0.0051329	--
NMOG (Non-methane organic gases)	0.0052869	--
PM (Particulate Matter)	0.0009942	--
HC-TOTAL (Total Hydrocarbon)	0.007578	--

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

### Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
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<b>Test Result Name</b>	<b>Unrounded Test Result</b>	<b>Verify Calculated CO2</b>
Carbon dioxide	0	--

**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	0.0010	--	--	--	0.0000	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.49	--	--	--	0.02	--	0.5	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0053	1	1.10	--	0.0107	--	0.016	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0121	--	--	--	--	--	0.029	0.060	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0068	--	--	--	0.0066	--	0.013	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0010	--	--	--	0.0000	--	0.001	0.006	Pass

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62									
<b>Emission Data Vehicle Information</b>												
<b>Vehicle ID / Configuration</b>	24-TN2H / 0	<b>Manufacturer Vehicle Configuration Number</b>	0									
<b>Original Test Group Name</b>	RTYXT02.4P34	<b>Original Evaporative/Refueling Family</b>	RTYXR0170J82									
<b>Original Test Vehicle Model Year</b>	2024											
<b>Vehicle Model</b>												
<b>Represented Test Vehicle Make</b>	TOYOTA	<b>Represented Test Vehicle Model</b>	TACOMA HYBRID 4WD									
<b>Leak Family Details</b>												
<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--									
<b>Drive Sources and Fuel System Details</b>												
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> <tr> <td>2</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	2	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel										
1	Combustion Engine	Gasoline										
2	Electric Motor	Electricity										
<b>Hybrid Indicator</b>	Yes											
<b>Multiple Fuel Storage</b>	--	<b>Multiple Fuel Combustion</b>	--									
<b>Fuel Cell Indicator</b>	No	<b>Rechargeable Energy Storage System Indicator</b>	Yes									
<b>Rechargeable Energy Storage System</b>	Battery(s)	<b>Rechargeable Energy Storage System, if 'Other'</b>	--									
<b>Off-board charge Capable Indicator</b>	No											
<b>Odometer Correction -- Initial</b>	10	<b>Odometer Correction Factor</b>	1									
<b>Odometer Correction Sign</b>	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor											
<b>Odometer Correction Units</b>	Miles											
<b>Engine Code</b>	01	<b>Rated Horsepower</b>	278									
<b>Displacement (liters)</b>	2.393											
<b>Air Aspiration Method</b>	Turbocharged	<b>Air Aspiration Method, if 'Other'</b>										
<b>Number of Air Aspiration Devices</b>	1	<b>Air Aspiration Device Configuration</b>	Single									
<b>Charge Air Cooler Type</b>	Air	<b>Drive Mode While Testing</b>	2-Wheel Drive, Rear									
<b>Shift Indicator Light Usage</b>	Not equipped	<b>Aged Emission Components</b>	4,000 (mi)									
<b>Curb Weight (lbs)</b>	5275	<b>Equivalent Test Weight (pounds)</b>	5500									
<b>GVWR (lbs)</b>	6735	<b>N/V Ratio</b>	26.1									
<b>Axle Ratio</b>	3.58											
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	8									
<b>Transmission Lockup</b>	Yes	<b>Creep Gear</b>	No									

## Certification Summary Information Report

Test Group		VTYXT02.4E4A			Evaporative/Refueling Family			VTYXR0170J62
<b>Dynamometer Coefficients:</b>								
		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	43.574	0.46205	0.033732	18.443	0.0265	0.03617	20.1	
US06	43.095	0.46541	0.034803	99.999	9.99999	9.999999	N/A	
<b>Emission Control Device Comments</b>		--						
<b>Manufacturer Test Vehicle Comments</b>		Drive mode is SPORT S+. US06 set value is dummy.						

### Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10084963</b>	<b>Test Procedure</b>	<b>23 - 2-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	RTYX10084962	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	02/20/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	243R01	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Engineering & Manufacturing North America, Inc. 2		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	3952	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes	<b>Road Speed Fan Usage</b>	Yes
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>CO2 BAG 1 (Bag 1 Carbon Dioxide)</b>	0	--
<b>FE BAG 1 (Bag 1 Fuel Economy)</b>	999	999
<b>CO2 BAG 2 (Bag 2 Carbon Dioxide)</b>	0	--
<b>FE BAG 2 (Bag 2 Fuel Economy)</b>	999	999
<b>CO2 BAG 3 (Bag 3 Carbon Dioxide)</b>	0	--
<b>FE BAG 3 (Bag 3 Fuel Economy)</b>	999	999
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.3575	--

**Manufacturer Test Comments**                      HSL=0.0280, 1ST DBL=0.3295, 2ND DBL=0.3115, 1ST DBL IS ADDED KEY OFF MONITOR LOSS(0.0010 GRAM)

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	0.3575	0.0000	0.358	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.3575	0.0000	0.358	0.500	Pass

### Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Test #</b>	<b>RTYX10085261</b>	<b>Test Procedure</b>	<b>34 - Federal fuel 3-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	RTYX10085252	<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
<b>Test Date</b>	03/19/2023	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	243R02	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	Toyota Motor Engineering & Manufacturing North America, Inc. 2		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	4129	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	Yes	<b>Road Speed Fan Usage</b>	Yes
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
<b>CO2 BAG 1 (Bag 1 Carbon Dioxide)</b>	0	--
<b>FE BAG 1 (Bag 1 Fuel Economy)</b>	999	999
<b>CO2 BAG 2 (Bag 2 Carbon Dioxide)</b>	0	--
<b>FE BAG 2 (Bag 2 Fuel Economy)</b>	999	999
<b>CO2 BAG 3 (Bag 3 Carbon Dioxide)</b>	0	--
<b>FE BAG 3 (Bag 3 Fuel Economy)</b>	999	999
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	0.1713	--

**Manufacturer Test Comments**                      HSL=0.0443, 1ST DBL=0.1270, 2ND DBL=0.0971, 3RD DBL=0.0990, 1ST DBL IS ADDED KEY OFF MONITOR LOSS(0.0010GRAM)

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	0.1713	0.0000	0.171	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1713	0.0000	0.171	0.500	Pass





### Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
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**Dynamometer Coefficients:**

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
<b>City/Highway/Evap</b>	38.511	0.43185	0.032231	99.999	9.99999	9.999999	18.8
<b>US06</b>	38.35	0.43109	0.032685	99.999	9.99999	9.999999	N/A

**Emission Control Device Comments**

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**Manufacturer Test Vehicle Comments**

Drive mode is SPORT S+. ORVR test only. RL set value is dummy.



## Certification Summary Information Report

Test Group	VTYXT02.4E4A	Evaporative/Refueling Family	VTYXR0170J62
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>2F3-03</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	<b>Fuel Batch Calibration Date</b>	06/01/2023
<b>Fuel Batch Calibration Effective Date</b>	09/13/2023	<b>Fuel Batch Calibration Ineffective Date</b>	09/30/2023
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.738
<b>Fuel Ethanol Volume Percent (%)</b>	9.8	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17832
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.826	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>243R01</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	<b>Fuel Batch Calibration Date</b>	12/11/2023
<b>Fuel Batch Calibration Effective Date</b>	02/12/2024	<b>Fuel Batch Calibration Ineffective Date</b>	02/12/2025
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.752
<b>Fuel Ethanol Volume Percent (%)</b>	9.8	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	18512
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.827	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>2E3-02</b>	<b>Fuel Calibration Number</b>	<b>3</b>
<b>Test Fuel Type</b>	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	<b>Fuel Batch Calibration Date</b>	05/13/2023
<b>Fuel Batch Calibration Effective Date</b>	09/01/2023	<b>Fuel Batch Calibration Ineffective Date</b>	09/30/2023
<b>Carbon Weight Fraction NMHC</b>	--	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	--
<b>Fuel Density (grams/cubic ft)</b>	--	<b>Fuel Specific Gravity</b>	0.739
<b>Fuel Ethanol Volume Percent (%)</b>	10	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17811
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.825	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>2M0A01</b>	<b>Fuel Calibration Number</b>	<b>30</b>
<b>Test Fuel Type</b>	29 - Cold CO E10 Premium Gasoline (Tier 3)	<b>Fuel Batch Calibration Date</b>	12/24/2020
<b>Fuel Batch Calibration Effective Date</b>	08/01/2023	<b>Fuel Batch Calibration Ineffective Date</b>	08/31/2023

## Certification Summary Information Report

Test Group	VTYXT02.4E4A	Evaporative/Refueling Family	VTYXR0170J62
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)	17867
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	--
<b>Fuel Batch ID</b>	<b>243R02</b>	<b>Fuel Calibration Number</b>	<b>1</b>
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	02/16/2024
Fuel Batch Calibration Effective Date	02/21/2024	Fuel Batch Calibration Ineffective Date	02/21/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18488
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--
<b>Fuel Batch ID</b>	<b>2D3A01</b>	<b>Fuel Calibration Number</b>	<b>8</b>
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	04/19/2023
Fuel Batch Calibration Effective Date	03/01/2024	Fuel Batch Calibration Ineffective Date	03/31/2023
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.739
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17859
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	--
<b>Fuel Batch ID</b>	<b>2E3-02</b>	<b>Fuel Calibration Number</b>	<b>2</b>
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	05/13/2023
Fuel Batch Calibration Effective Date	08/01/2023	Fuel Batch Calibration Ineffective Date	08/31/2023
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.739
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17811

**Certification Summary Information Report**

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
<b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>	--	<b>Fuel Carbon Mass Fraction (E10)</b>	--
<b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b>	0.825	<b>Weight Fraction CO2</b>	--

**Certification Summary Information Report**

<b>Test Group</b>	VTYXT02.4E4A	<b>Evaporative/Refueling Family</b>	VTYXR0170J62
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**Consolidated List of Standards**

**Exhaust Standards**

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	California LEV-IV ULEV50
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	--	--	--	--	--	--	0.02	1.7
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0107	999.999
150,000 miles	NMOG+NOX	--	1	1.10	--	--	--	0.0173	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	California LEV-IV ULEV50
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	--	--	--	--	--	--	0.02	9.6
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0107	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0.0173	0.060
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.006

<b>Cert Region</b>	California + CAA Section 177 states	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	California LEV-IV ULEV50
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	--	--	--	--	--	--	0.00	12.5

### Certification Summary Information Report

<b>Test Group</b>		VTYXT02.4E4A			<b>Evaporative/Refueling Family</b>			VTYXR0170J62		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			HWFE		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CREE	--	--	--	--	--	--	0.041	999.999	
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0107	999.999	
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0173	0.050	
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			US06		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.006	

### Certification Summary Information Report

<b>Test Group</b>		VTYXT02.4E4A			<b>Evaporative/Refueling Family</b>			VTYXR0170J62		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Federal fuel 2-day exhaust (w/can load)		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.02	1.7	
150,000 miles	CO-COMP	--	--	--	--	--	--	0.02	4.2	
150,000 miles	CREE	--	--	--	--	--	--	0.041	999.999	
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004	
150,000 miles	METHANE	--	--	--	--	--	--	0.0113	0.030	
150,000 miles	N2O	--	--	--	--	--	--	0.0008	0.010	
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0107	999.999	
150,000 miles	NMOG+NOX	--	1	1.10	--	--	--	0.0173	0.050	
150,000 miles	NMOG+NOX-COMP	--	1	1.03	--	--	--	0.0173	0.060	
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999	
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV ULEV50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			CA fuel 50 Deg(F) exhaust test		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
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

<b>Test Group</b>		VTYXT02.4E4A			<b>Evaporative/Refueling Family</b>			VTYXR0170J62		
<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV ULEV50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			SC03		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	CO	--	--	--	--	--	--	0.02	1.7	
150,000 miles	NMOG	--	1	1.10	--	--	--	0.0107	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0.0173	0.050	
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999	

<b>Cert Region</b>		California + CAA Section 177 states			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			California LEV-IV ULEV50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			HWFE		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
150,000 miles	NMOG	--	1	1.03	--	--	--	0.0107	999.999	
150,000 miles	NMOG+NOX	--	1	1.03	--	--	--	0.0173	0.050	
150,000 miles	NOX	--	--	--	--	--	--	0.0066	999.999	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			<b>Standard Level</b>			Federal Tier 3 Bin 50		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			Cold CO		
<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>RAF</b>	<b>NMOG / NMHC</b>	<b>Upward Diesel Adjustment Factor</b>	<b>Downward Diesel Adjustment Factor</b>	<b>Mult DF</b>	<b>Add DF</b>	<b>Std</b>	
50,000 miles	CO	--	--	--	--	--	--	0.00	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0.01	0.5	

**Evaporative/Refueling Standards**

<b>Evaporative/Refueling Family</b>		VTYXR0170J62			<b>Cert Region</b>			California + CAA Section 177 states		
<b>Cert/In-Use Code</b>		Cert			<b>Standard Level</b>			California LEV-III Zero Evap (Option 2)		
<b>Test Procedure</b>		Federal fuel 3-day evap								
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>					
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0000					

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A		<b>Evaporative/Refueling Family</b>	VTYXR0170J62	
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>		
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.000
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>		
<b>Test Procedure</b>	Federal Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.01	0.000
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	Federal Federal Tier 3 Evap	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>		
<b>Test Procedure</b>	Federal Fuel Running Loss				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	Federal Federal Tier 3 Evap	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>		
<b>Test Procedure</b>	Federal fuel 3-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0000
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>		
<b>Test Procedure</b>	2-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0000

## Certification Summary Information Report

<b>Test Group</b>	VTYXT02.4E4A		<b>Evaporative/Refueling Family</b>	VTYXR0170J62	
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	Federal	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Federal Tier 3 Evap	
<b>Test Procedure</b>	Spitback				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	4,000 miles	SPITBACK	--	1.0	--
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	Federal	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Federal Tier 3 Evap	
<b>Test Procedure</b>	2-day evap				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0000
<b>Evaporative/Refueling Family</b>	VTYXR0170J62		<b>Cert Region</b>	Federal	
<b>Cert/In-Use Code</b>	Cert		<b>Standard Level</b>	Federal Tier 3 Evap	
<b>Test Procedure</b>	Federal fuel refueling test (ORVR)				
<b>Fuel</b>	<b>Useful Life</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Std</b>	<b>Add DF</b>
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.000

## Certification Summary Information Report

Test Group	VTYXT02.4E4A	Evaporative/Refueling Family	VTYXR0170J62
<b>Glossary</b>			
<b>Useful Life</b>			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
<b>Emission Name</b>			
HC-TOTAL	Total Hydrocarbon	AS-VOLT	Average System Voltage
CO	Carbon Monoxide	CO2 BAG 1	Bag 1 Carbon Dioxide
CO2	Carbon dioxide	CO2 BAG 2	Bag 2 Carbon Dioxide
CREE	Carbon-Related Exhaust Emissions	CO2 BAG 3	Bag 3 Carbon Dioxide
OPT-CREE	Optional Carbon-Related Exhaust Emissions	CO2 BAG 4	Bag 4 Carbon Dioxide
NOX	Nitrogen Oxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
PM	Particulate Matter	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
PM-COMP	SFTP Composite Particulate Matter	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM	Non-methane Hydrocarbon	DT-ASCR	Drive Trace Absolute Speed Change Rating
OMHCE	Organic material Hydrocarbon Equivalent	DT-EER	Drive Trace Energy Economy Rating
OMNMHCE	Organic material non-methane HC equivalent	COMB-CREE	Combined Carbon-Related Exhaust Emissions
NMOG	Non-methane organic gases	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
HCHO	Formaldehyde	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
H3C2HO	Acetaldehyde	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	LEAK-DIA	Effective Leak Diameter (inches)
CO-COMP	SFTP Composite Carbon Monoxide	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
ETHANOL	C2H5OH - Ethanol	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
FE BAG 1	Bag 1 Fuel Economy	KW-HRS	Integrated DC KW-HRS
FE BAG 2	Bag 2 Fuel Economy	CH4 BAG 1	Bag 1 Methane
FE BAG 3	Bag 3 Fuel Economy	CH4 BAG 2	Bag 2 Methane
FE BAG 4	Bag 4 Fuel Economy	CH4 BAG 3	Bag 3 Methane
MFR FE	Manufacturer Fuel Economy	CH4 BAG 4	Bag 4 Methane
HC	Hydrocarbon for Running Loss and ORVR	CO BAG 1	Bag 1 Carbon Monoxide
METHANE	CH4 - Methane	CO BAG 2	Bag 2 Carbon Monoxide
METHANOL	CH3OH - Methanol	CO BAG 3	Bag 3 Carbon Monoxide
N2O	Nitrous Oxide	CO BAG 4	Bag 4 Carbon Monoxide
SPITBACK	Spitback Hydrocarbon in grams	NMOG BAG 1	Bag 1 Non-methane organic gases
AMP-HRS	Integrated Amp-hours	NMOG BAG 2	Bag 2 Non-methane organic gases
START-SOC	System Start State of Charge Watt-hours	NMOG BAG 3	Bag 3 Non-methane organic gases
END-SOC	System End State of Charge Watt-hours	NMOG BAG 4	Bag 4 Non-methane organic gases
ACT-DISTANCE	Actual Distance Driven (miles)		
<b>Certification Region</b>			

## Certification Summary Information Report

Test Group	VTYXT02.4E4A	Evaporative/Refueling Family	VTYXR0170J62
CA	California + CAA Section 177 states	FA	Federal
<b>Exhaust Emission Standard Level</b>			
B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125

## Certification Summary Information Report

Test Group		VTYXT02.4E4A	Evaporative/Refueling Family		VTYXR0170J62
L3SULEV170	California LEV-III SULEV170		L4ULEV200	California LEV-IV ULEV200	
L3SULEV150	California LEV-III SULEV150		L4ULEV250	California LEV-IV ULEV250	
L3LEV630	California LEV-III LEV630		L4ULEV270	California LEV-IV ULEV270	
L3ULEV570	California LEV-III ULEV570		L4ULEV40	California LEV-IV ULEV40	
L3ULEV400	California LEV-III ULEV400		L4ULEV400	California LEV-IV ULEV400	
L3ULEV270	California LEV-III ULEV270		L4ULEV50	California LEV-IV ULEV50	
L3SULEV230	California LEV-III SULEV230		L4ULEV60	California LEV-IV ULEV60	
L3SULEV200	California LEV-III SULEV200		L4ULEV70	California LEV-IV ULEV70	
<b>Transmission Type Code</b>					
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)	
<b>Drive System Code</b>					
4	4-Wheel Drive		P	Part-time 4-Wheel Drive	
F	2-Wheel Drive, Front		A	All Wheel Drive	
R	2-Wheel Drive, Rear				
<b>Additional Terms and Acronyms</b>					
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: VTYXT02.4E4A

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	RTYX10082630	RTYX10082648	RTYX10082655	RTYX10082645	RTYX10082653	17.0	16.8	21.7	20.9

2. Interim/In-Use Standard

	Federal	California
FTP	Not applicable	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)
- Spitback
- Tier 4/LEV IV 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 : VTYXHHGNNB2J  
 Test Group : VTYXT02.4E4A  
 Evap./Refueling Family : VTYXR0170J62  
 Emission Control System : DFI+SFI,WR-HO2S(2),TWC(2),TC,CAC

Carline	Model name	Model code	Engine Code	Valves/cyl	Engine Disp. (L)	Sales Area	Transmission*2/ Overdrive	SIL	Tire*1	N/V	ETW (lb.)	Fuel tank vol. (L)	Rated HP
LAND CRUISER	TOYOTA LAND CRUISER / TOYOTA LAND CRUISER Premium Package	TJH250L-GNZAZA	01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	265/60R20 AS	25.2	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	265/60R20 AS#2	25.2	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	265/70R18 AS	25.1	5500	68	278@6000

Note \*1: AS : All-season tire  
 OFF : Off-road tire

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

## 12.1 Vehicle parameters

Carline	Model name	Model code	Engine Code	Valves/cyl	Engine Disp. (L)	Sales Area	Transmission*2/ Overdrive	SIL	Tire*1	N/V	ETW (lb.)	Fuel tank vol. (L)	Rated HP
LAND CRUISER	TOYOTA LAND CRUISER 1958	TJH250L-GNZUZA	01	4	2.393	50	L580F-B (S8-1 SS) / N/A	N/A	245/70R18 AS	26.0	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	245/70R18 AS	26.0	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-1 SS) / N/A	N/A	245/70R18 AS#2	26.0	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	245/70R18 AS#2	26.0	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-1 SS) / N/A	N/A	265/70R18 AS	25.1	5500	68	278@6000
			01	4	2.393	50	L580F-B (S8-3 SS) / N/A	N/A	265/70R18 AS	25.1	5500	68	278@6000

Note \*1: AS : All-season tire

OFF : Off-road 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 : VTYXT02.4E4A  
 Evap/refueling family : VTYXR0170J62

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:

	FTP	PS*1	QDA*2	US06		SC03
					Interim	
ULEV125						
ULEV70						
ULEV60						
ULEV50	LEV IV				LEV IV	LEV IV
ULEV40						
SULEV30						
SULEV25						
SULEV20						
SULEV15						

\*1: Partial Soak  
 \*2: Quick Drive-Away

This combination meet all applicable regulations contained within 40 CFR Part 85, 86, and 600, within Title 13 of the California Code of Regulation, the application is current as of this date.



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

**15. Other Information**

15.1 Fee filing form

Invoice No.:EPA2027MY001

## US EPA Fee Form

## Tracking Information

Pay.gov Tracking ID: 27TQRSAQ

Agency Tracking ID: 77237093939

[Help and EPA Instructions](#)

\* Required Field

## General Information

Date: 12/11/2025

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**

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 \*

VTYXT02.4E4A

## 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

## Payment Information

16. **Confidential Information**

Please refer to the CBI common file.

**17. California ARB Information**

- 17.1 Statement of Compliance
- 17.2 High-Altitude Test Requirements
- 17.3 Compliance with fuel fill pipe specifications
- 17.4 Compliance with the location requirement of the vent tube opening in the fill pipe
- 17.5 Supplemental information and data for compliance with the enhanced evaporative requirements for California
- 17.6 New unique or changed emission control technology
- 17.7 Service literature

Please refer to the FOI common file.

In addition to the Statement of Compliance in the FOI Common file above, pursuant to 13 CCR §1961.4(d)(4), Toyota states that the vehicles meet the SC03 NMOG+NOx and CO exhaust emissions for vehicles tested using the SC03 test procedures incorporated in the "California 2026 and Subsequent Model Year Criteria Pollutant Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

17.8.1 Emission Control Information Labels

<b>TOYOTA</b>	VEHICLE EMISSION CONTROL INFORMATION	
	<b>TOYOTA MOTOR CORPORATION</b>	
Conforms to regulations 2027MY	TEST GROUP : VTYXT02.4E4A EVAP FAMILY : VTYXR0170J62	
U. S. EPA : IT4B50 LDT4 OBD : CA II Fuel : Gasoline		
This vehicle is authorized for sale in California by EO.		
DFI+SFI, WR-HO2S(2), TWC(2), TC, CAC		
No adjustments needed.		
25293	T24A-FTS	<b>PM</b>

17.8.2 Battery labels

G9280-34011	EV	A2
BATTERY ASSY, HEV		
OF2PA--34011G3F410000001		 URL
IND : 01-04-2025	P : 240V	
	NP20-RL2 C : 1.0V	
	BMN01	
	6.5Ah	
ID	NiMHMM-X.R/TMC.2504	
	TOYOTA BATTERY Co., Ltd.	

EV BATTERY INFORMATION	00001
BIN:OF2PA--34011G3F410000001	
CHEM. ID:NiMHMM-X. R/TMC. 2504	
PACK MINIMUM VOLTAGE:240V	
CELL MINIMUM VOLTAGE:1.0V	
	PACK CAPACITY: 6.5Ah
	VIN:12345678912345677
	URL
TOYOTA MOTOR CORPORATION	

17.9 Service Information Availability

17.10 Identification of AB71-Qualified Vehicles (Mail-Out #MSO-2000-04)

Please refer to the FOI common file.

2027 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Test Group: VTYXT02.4E4A Evap Fam: VTYXR0170J62  
 All Eng Codes in Eng Fam: CA \_\_\_ 49S \_\_\_ 50S x AB965 \_\_\_ , ORVR: YES x NO \_\_\_  
 Exh Std: CA LEV IV ULEV125 \_\_\_ ULEV70 \_\_\_ ULEV60 \_\_\_ ULEV50 x US EPA Interim Tier 4 x  
 ULEV40 \_\_\_ SULEV30 \_\_\_ SULEV25 \_\_\_ SULEV20 \_\_\_ SULEV15 \_\_\_  
 Evap Std: LEVIII (Option 1) \_\_\_ LEVIII (Option 2) \_\_\_ LEV IV x  
 Veh Class(es): PC \_\_\_ LDT1 \_\_\_ LDT2 x MDV1 \_\_\_ MDV2 \_\_\_ MDV3 \_\_\_ MDV4 \_\_\_ MDV5 \_\_\_  
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Fuel Type(s): Dedicated x Flex-Fuel \_\_\_ Dual-Fuel \_\_\_ Bi-Fuel \_\_\_ Gasoline x Diesel \_\_\_  
 CNG \_\_\_ LNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_\_\_  
 Exh Emiss Test Fuel(s): Indo \_\_\_ CBG x CNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_\_\_  
 Diesel: 13 CCR 2282 \_\_\_ 40 CFR 86.113-90 \_\_\_ 40 CFR 86.113-94 \_\_\_  
 Evaporative Emission Test Procedure: California \_\_\_ Federal x  
 Service Accum: Std AMA \_\_\_ Mod AMA \_\_\_ Mfr ADP x Other (specify) \_\_\_\_\_  
 NMOG Test Procedure: N/A \_\_\_ Std \_\_\_ Equiv x R/L Test Proc: SHED \_\_\_ Pt Source x  
 Engine Configuration: I4 Displacement: 2.4 Liters 146.0 Cubic Inches  
 Valves per Cylinder: 4 Rated HP 1: 278@6000 RPM  
 Engine: Front x Mid \_\_\_ Rear \_\_\_ Drive: FWD \_\_\_ RWD \_\_\_ 4WD-FT x 4WD-PT \_\_\_  
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): DFI+SFI,WR-HO2S(2),TWC(2),TC,CAC  
 (use abbreviations per SAE J1930 JUN93)

Engine Code (also list CA/49S/50ST)	Vehicle Models (if coded see attachment)	Trans. (M5, A4, etc.)*	ETW or Test Wt	GVWR	DPA or RLHP
01	TJH250L-GNZAZA	S8-3 SS	5500	6835	18.6/18.8
	TJH250L-GNZUZA	S8-1 SS	5500	6725	18.5/18.6
		S8-3 SS	5500	6725	18.5/18.6

Comments: Please refer to manufacturer's HP list for correct dyno test HP setting based on model and equipment.  
 Note \*: The number after “-“ indicates the number of transmission mode.

VEHICLE MODELS:

LAND CRUISER

TJH250L-GNZAZA

TJH250L-GNZUZA

2027 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: TOYOTA Exh Test Group: VTYXT02.4E4A Evap Fam: VTYXR0170J62  
 All Eng Codes in Eng Fam: CA \_\_\_ 49S \_\_\_ 50S x AB965 \_\_\_ , ORVR: YES x NO \_\_\_  
 Exh Std: CA LEV IV ULEV125 \_\_\_ ULEV70 \_\_\_ ULEV60 \_\_\_ ULEV50 x US EPA Interim Tier 4 x  
 ULEV40 \_\_\_ SULEV30 \_\_\_ SULEV25 \_\_\_ SULEV20 \_\_\_ SULEV15 \_\_\_  
 Evap Std: LEVIII (Option 1) \_\_\_ LEVIII (Option 2) \_\_\_ LEV IV x  
 Veh Class(es): PC \_\_\_ LDT1 \_\_\_ LDT2 x MDV1 \_\_\_ MDV2 \_\_\_ MDV3 \_\_\_ MDV4 \_\_\_ MDV5 \_\_\_  
 Single Cert Std for Multi-Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)  
 Fuel Type(s): Dedicated x Flex-Fuel \_\_\_ Dual-Fuel \_\_\_ Bi-Fuel \_\_\_ Gasoline x Diesel \_\_\_  
 CNG \_\_\_ LNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_\_\_  
 Exh Emiss Test Fuel(s): Indo \_\_\_ CBG x CNG \_\_\_ LPG \_\_\_ M85 \_\_\_ Other (specify) \_\_\_\_\_  
 Diesel: 13 CCR 2282 \_\_\_ 40 CFR 86.113-90 \_\_\_ 40 CFR 86.113-94 \_\_\_  
 Evaporative Emission Test Procedure: California \_\_\_ Federal x  
 Service Accum: Std AMA \_\_\_ Mod AMA \_\_\_ Mfr ADP x Other (specify) \_\_\_\_\_  
 NMOG Test Procedure: N/A \_\_\_ Std \_\_\_ Equiv x R/L Test Proc: SHED \_\_\_ Pt Source x  
 Engine Configuration: I4 Displacement: 2.4 Liters 146.0 Cubic Inches  
 Valves per Cylinder: 4 Rated HP1: 278@6000 RPM  
 Engine: Front x Mid \_\_\_ Rear \_\_\_ Drive: FWD \_\_\_ RWD \_\_\_ 4WD-FT x 4WD-PT \_\_\_  
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): DFI+SFI,WR-HO2S(2),TWC(2),TC,CAC

(use abbreviations per SAE J1930 JUN93)

<u>Sect/Page#</u>	<u>Sect/Page#</u>	<u>Sect/Page#</u>	<u>Sect/Page#</u>
1 Authorized Representative	<u>FOI-1.2</u>	22 Gen std, increase in Emiss,	
2 Fuel Specifications	<u>-</u>	Safety, Meets all Reqm	<u>FOI-8</u>
3 Test Equipment	<u>-</u>	23 Driveability Statement	<u>FOI-17.1</u>
4 Test Procedure	<u>-</u>	24 Adjustable Parameters	<u>-</u>
5 Mileage Accumulation Route	<u>CBI-4</u>	25 Tamper Resistance Method(s)	<u>-</u>
6 Emission Warranty Statement	<u>Part 2 FOI-6.00.01</u>	26 Fill Pipe Specifications	<u>FOI-17.3</u>
7 Maint: Cert/Req'd/Recm'd	<u>-</u>	27 High Altitude Compliance	<u>FOI-17.2</u>
8 Emiss Label/Vac Hose Diag	<u>-</u>	28 OBD Sys incl Marked Revisions	<u>CBI-9.1</u>
9 Evap Control System	<u>FOI-3</u>	29 I & M Test Procedure & Data	<u>-</u>
10 Engine Parameters	<u>5</u>	30 50 Degree F Compliance	<u>-</u>
11 Fuel System	<u>-</u>	31 Manufacturer's RAF	<u>-</u>
12 Ignition System	<u>-</u>	32 Phase-In Plans	<u>CBI-17</u>
13 Exhaust Control System	<u>FOI-5</u>	33 NMOG+NOx Fleet Average	
14 Proj Sales(LDT/MDV Split)	<u>CBI-17.1</u>	Calculation	<u>CBI-17.13</u>
15 Vehicle Description	<u>12.1</u>	34 AB965 Credits/Withdrawals	<u>-</u>
16 Evap Bench Test Procedure	<u>-</u>	35 EPA Certificate	<u>to follow</u>
17 R/L Temp & Press Profiles	<u>FOI-4.3</u>	36 Equiv NMOG Proc-ARB Approval	<u>NMOG/NMHC=</u>
18 EDV Selection	<u>-</u>		<u>FTP=1.10, SFTP&amp;HWY=1.03</u>
19 Prod Veh same as Test Veh	<u>FOI-17.1</u>		
20 Emission Label Durability	<u>-</u>		
	<u>Durability</u>	<u>Emission</u>	<u>Emission</u>
21 Test Vehicle Information	<u>Data Vehicle</u>	<u>Data Vehicle</u>	<u>Emission</u>
C/O or C/A MY & ID	<u>C/O 24D-TH1H</u>	<u>C/O 24-TH1H</u>	<u>Data Vehicle</u>
Vehicle Log Page(s)	<u>-</u>	<u>6</u>	<u>6</u>
Zero Mile Book Page(s)	<u>-</u>	<u>7</u>	<u>7</u>
Maint Logs & Engr Eval	<u>-</u>	<u>-</u>	<u>-</u>

Continued on next pag

2027 MODEL-YEAR AIR RESOURCES BOARD CERTIFICATION REVIEW SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Projected Emissions/ Evaporative

Manufacturer: TOYOTA

Exhaust Test Group: VTYXT02.4E4A

Evaporative Family: VTYXR0170J62

Detailed information for certification is also submitted by E-Cert.

17.11.00

Test group: VTYXT02.4E4A

E.O.# \_\_\_\_\_

Page \_\_\_\_\_

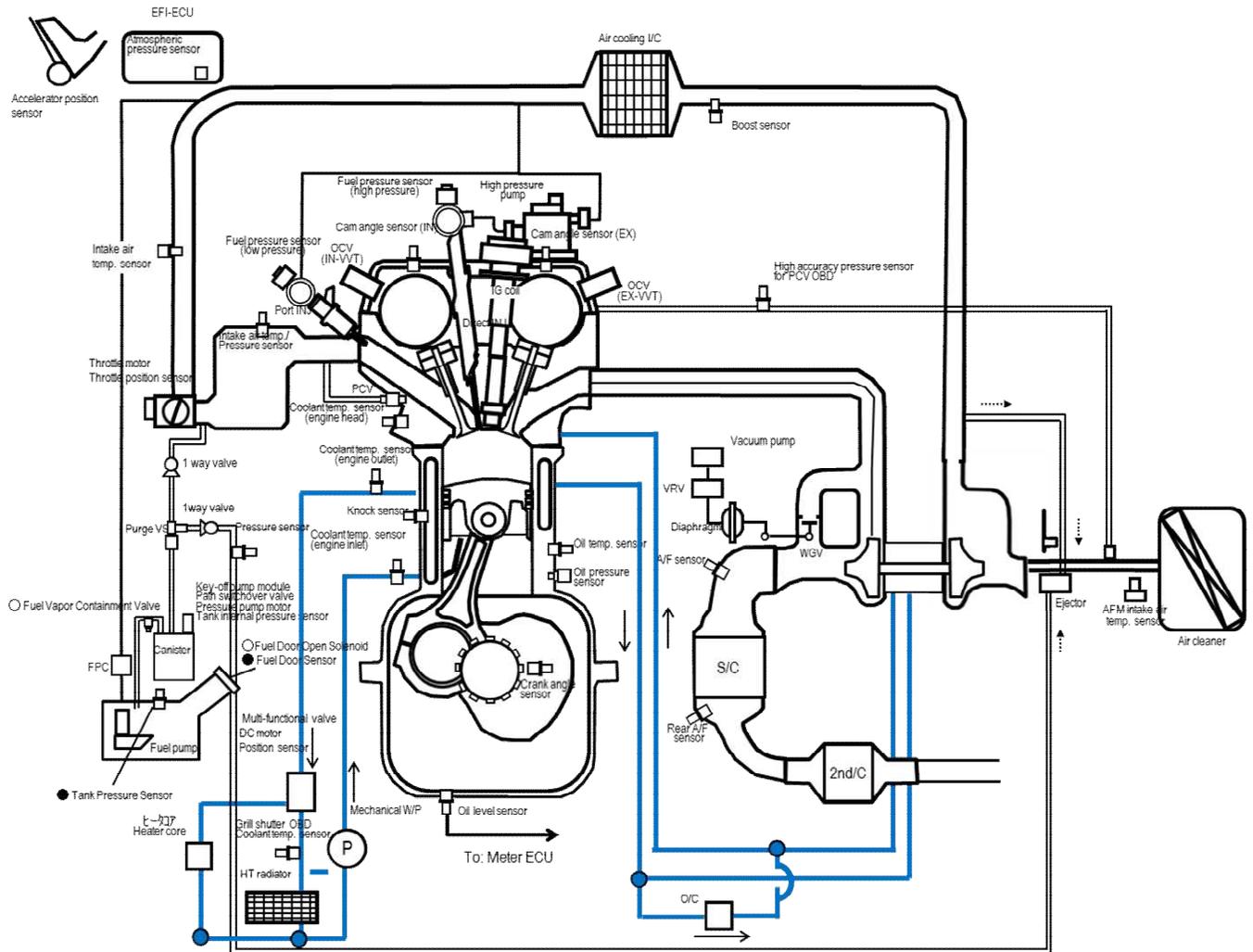
Attestation of compliance with California Inspection and Maintenance emission standards

Toyota states that the models in this test group comply with the California Inspection and Maintenance emission requirements base on our good engineering evaluation.

- 17.12 Test group and Evaporative family sales for California
- 17.13 California Phase-in Compliance
- 17.14 Compliance with OBD-II Phase-in Requirements
- 17.15 Hybrid Electric Vehicle information (if applicable)
- 17.16 Warranty information (draft)

Please refer to the CBI common file.

17.17 Engine Control System Schematic



**18. Information on Service of Process**

Please refer to Section 1 of the FOI common file.