

Certification Summary Information Report

Manufacturer	FCA US LLC	Manufacturer Code	CRX
Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Certificate Number	VCRXT06.4570-019	CARB Executive Order #	--
Certificate Issue Date	04/24/2026	Certificate Revision Date	--
Certificate Effective Date	04/24/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	04/16/2026 09:06:35 AM
Model Year	2027		

Test Group Information

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

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Multipoint/sequential fuel 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	LDT4
Federal Clean Fuel Vehicle	Yes	Federal Clean Fuel Vehicle Standard	LEV
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VCRXGPGNNF20	Durability Group Equivalency Factor	1.0
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	07/20/2026	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	VCRXT03.6570
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	2
OBD Deficiencies Comments	SAE J1979-2 Implementation, Adaptive Cruise Control and Parallel Park Systems Default Action		
Mfr Test Group Comments	T4iBIN160 E10 - City Litmus Value: 10.2; City Litmus Threshold: 9.6; Hwy Litmus Value: 15.4; Hwy Litmus Threshold: 13.9 This test group is being certified to Tier 4 Interim standards. FCA US LCC agrees to meet the Tier 4i BIN 30 standards and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group VCRXT06.4570		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	04/13/2026 01:50:42 PM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	hdpe/co-ex				
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)	172	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	0				
Mfr Evaporative/Refueling Family Comments	This Evaporative Family is being certified with an evaporative FEL of 0.600 grams, using credits as compared to the nominal standard of 0.500 grams.						
Leak Family Details							
Leak Family Indicator	Yes						
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	--						
Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description				
VCRXR0172RR0-LF1	50 State	0.02	--				
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	California + CAA Section 177 states	4-Wheel Drive	Automatic	8	Yes
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	Federal	4-Wheel Drive	Automatic	8	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W-40				
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
Substrate Construction			
Monolith			
Mfr After Treatment Device (ATD) Comments			
THREE WAY CATALYST			
Direct Ozone Reduction (DOR) Device			
Not Equipped			
Mfr Emission Control Device Comments			
--			
Engine Configuration Number 1			
Engine Displacement (liters)	6.4	Engine Rated Horsepower	470
Number of Inlet Valves Per Cylinder	1	Number of Exhaust Valves Per Cylinder	1
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	0
Air Aspiration Device Configuration	--	Charge Air Cooler Type	N/A
Air Aspiration Drive Method(s)	--		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	solenoids		
Variable Valve Timing	No		
Variable Valve Timing System Description	--		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	--
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	--		

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0								
Engine Configuration Number 2											
Engine Displacement (liters)	6.4	Engine Rated Horsepower	475								
Number of Inlet Valves Per Cylinder	1	Number of Exhaust Valves Per Cylinder	1								
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	0								
Air Aspiration Device Configuration	--	Charge Air Cooler Type	N/A								
Air Aspiration Drive Method(s)	--										
Cylinder Deactivation	Yes										
Cylinder Deactivation Description	solenoids										
Variable Valve Timing	No										
Variable Valve Timing System Description	--										
Variable Valve Lift?	No										
Variable Valve Lift System Description	--										
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4								
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--								
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--								
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--								
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--								
Mfr Air/Fuel Sensor Comments	--										
Exhaust Gas Recirculation	--	Cooled Exhaust Gas Recirculation	No								
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--								
Closed Loop Air Injection System	No										
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--								
Mfr Engine Configuration Comments	--										
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	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570	12	228.2	20.7	286.1	1
SFTP LEV-III Official Test Numbers											
Test Group	Fuel	FTP	US06	SC03							
Gasoline	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570	PCRXT06.4570							

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	L8JLJ2008 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	JCRXT03.65P5	Original Evaporative/Refueling Family	JCRXR0172PP0
Original Test Vehicle Model Year	2018		

Vehicle Model

Represented Test Vehicle Make	Jeep	Represented Test Vehicle Model	Wrangler Unlimited 4X4
--------------------------------------	------	---------------------------------------	------------------------

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	0	Odometer Correction Factor	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-600	Rated Horsepower	295
Displacement (liters)	3.6		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	4258	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	5300	N/V Ratio	29.1
Axle Ratio	4.1		
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	43.45	0.1331	0.03998	-30.05	0.4585	0.03169	20
US06	43.45	0.1331	0.03998	-30.05	0.4585	0.03169	N/A

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0						
Emission Control Device Comments	--								
Manufacturer Test Vehicle Comments	JL LWB EVAP, 18EV-T03.65P5-2; updated for 2wd dyno testing at EPA; FCA testing was in 4WD dyno mode.								
Test #	JCRX91003702	Test Procedure	27 - California fuel 2-day evap						
Exhaust Test # for this Evap Test	JCRX91003690	Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline						
Test Date	09/27/2017	Fuel	Gasoline						
Fuel Batch ID	24670	Fuel Calibration Number	2						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	--								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	4427.1	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	No						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.2219</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2219	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2219	--							
Manufacturer Test Comments									
Hot_Soak_HC_(g) = 0.022678, Diurnal (gHC) = 0.199222									
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	0.2219	0.0057	0.228	0.6	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2219	0.0057	0.228	0.6	Pass	

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	L8JLJ2008 / 1	Manufacturer Vehicle Configuration Number	1
Original Test Group Name	JCRXT03.65P5	Original Evaporative/Refueling Family	JCRXR0172PP0
Original Test Vehicle Model Year	2018		

Vehicle Model

Represented Test Vehicle Make	Jeep	Represented Test Vehicle Model	Wrangler Unlimited 4X4
--------------------------------------	------	---------------------------------------	------------------------

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	0	Odometer Correction Factor	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	AA-600	Rated Horsepower	295
Displacement (liters)	3.6		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	4258	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	5300	N/V Ratio	29.1
Axle Ratio	4.1		
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	86.98	-0.5921	0.04897	55.38	-0.4694	0.04423	24
US06	86.98	-0.5921	0.04897	55.38	-0.4694	0.04423	N/A

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0						
Emission Control Device Comments	--								
Manufacturer Test Vehicle Comments	JL LWB 2WD Dyno mode, 18EV-T03.65P5-2								
Test #	JCRX10050401	Test Procedure	38 - CA fuel 3-day evap.						
Exhaust Test # for this Evap Test	JCRX10050397	Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline						
Test Date	08/27/2017	Fuel	Gasoline						
Fuel Batch ID	10499	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	CTC								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	4023	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	No						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.29217</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.29217	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.29217	--							
Manufacturer Test Comments	Callout: 18EV-T03.65P5-2; JL LWB Cert 3-Day/Evap (cE10) Hot_Soak_HC_(g) = 0.04967, Diurnal_HC (g) = 0.22086; Total =(0.27053 X 1.08) = 0.29217 (g)								
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	0.2922	0.009	0.301	0.6	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2922	0.009	0.301	0.6	Pass	

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0						
Test #	JCRX10050400	Test Procedure	37 - California Fuel Running Loss						
Exhaust Test # for this Evap Test	JCRX10050397	Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline						
Test Date	08/27/2017	Fuel	Gasoline						
Fuel Batch ID	10499	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	CTC								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4006	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									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.00003</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00003	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00003	--							
Manufacturer Test Comments									
Callout: 18EV-T03.65P5-2; JL LWB Cert RL Evap (cE10)									
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	0	0	0.05	Pass	
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0	0	0	0.05	Pass	

Test Group		VCRXT06.4570		Evaporative/Refueling Family		VCRXR0172RR0																													
Test #		JCRX10050402		Test Procedure		24 - Federal fuel refueling test (ORVR)																													
Exhaust Test # for this Evap Test		JCRX10050398		Test Fuel Type		46 - CARB LEV3 E10 Regular Gasoline																													
Test Date		09/09/2017		Fuel		Gasoline																													
Fuel Batch ID		10499		Fuel Calibration Number		1																													
Vehicle Class		N/A		DF Type		Mfr. Determined																													
Verify Test Lab ID		CTC																																	
E10 Evaporative Test Measurement Method		--																																	
Test Start Odometer Reading		4135		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		No																													
Test Results																																			
<table><tr><td colspan="2">Test Result Name</td><td colspan="2">Unrounded Test Result</td><td colspan="2">Verify Calculated FE Equivalent Value</td></tr><tr><td colspan="2">HC (Hydrocarbon for Running Loss and ORVR)</td><td colspan="2">0.038</td><td colspan="2">--</td></tr></table>									Test Result Name		Unrounded Test Result		Verify Calculated FE Equivalent Value		HC (Hydrocarbon for Running Loss and ORVR)		0.038		--																
Test Result Name		Unrounded Test Result		Verify Calculated FE Equivalent Value																															
HC (Hydrocarbon for Running Loss and ORVR)		0.038		--																															
Manufacturer Test Comments																																			
Callout: 18EV-T03.65P5-2; ORVR (cE10)																																			
<table><tr><td>Certification Region</td><td>Useful Life</td><td>Standard Level</td><td>Emission Name</td><td>Rounded Result</td><td>Add DF</td><td>Certification Level</td><td>Standard</td><td>Pass/Fail</td></tr><tr><td>Fed</td><td>150,000 miles</td><td>Federal Tier 3 Evap</td><td>HC</td><td>0.038</td><td>0</td><td>0.04</td><td>0.2</td><td>Pass</td></tr><tr><td>CA</td><td>150,000 miles</td><td>Other</td><td>HC</td><td>0.038</td><td>0</td><td>0.04</td><td>0.2</td><td>Pass</td></tr></table>									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	0.038	0	0.04	0.2	Pass	CA	150,000 miles	Other	HC	0.038	0	0.04	0.2	Pass
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	0.038	0	0.04	0.2	Pass																											
CA	150,000 miles	Other	HC	0.038	0	0.04	0.2	Pass																											

Test Group		VCRXT06.4570	Evaporative/Refueling Family		VCRXR0172RR0			
Test #		JCRX10074149		Test Procedure		65 - Evap Canister Bleed Test		
Exhaust Test # for this Evap Test		--		Test Fuel Type		46 - CARB LEV3 E10 Regular Gasoline		
Test Date		07/06/2017		Fuel		Gasoline		
Fuel Batch ID		--		Fuel Calibration Number		--		
Vehicle Class		N/A		DF Type		Mfr. Determined		
Verify Test Lab ID		IDIADA/STANT Spain						
E10 Evaporative Test Measurement Method		Calculated (1.08 x FID Total Hydrocarbons)						
Test Start Odometer Reading		0		Odometer Units		M		
4WD Test Dyno		No		Diesel Adjustment Factor Usage		--		
State of Charge Delta		--						
Drive Cycle Speed Tolerance Criteria		--		Road Speed Fan Usage		--		
Test Results								
Test Result Name			Unrounded Test Result			Verify Calculated FE Equivalent Value		
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)			0.015			--		
Manufacturer Test Comments								
			Test run on a rig with aged components (not actual vehicle)					
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	0.015	0	0.015	0.02	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.015	0	0.015	0.02	Pass

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0					
Emission Data Vehicle Information								
Vehicle ID / Configuration	V2WSJ1588 / 0	Manufacturer Vehicle Configuration Number	0					
Original Test Group Name	PCRXT06.4FP1	Original Evaporative/Refueling Family	PCRXR0204RP1					
Original Test Vehicle Model Year	2023							
Vehicle Model								
Represented Test Vehicle Make	Jeep	Represented Test Vehicle Model	Grand Wagoneer 4x4					
Leak Family Details								
Leak Family Identifier	--	Leak Family Name	--					
Drive Sources and Fuel System Details								
	<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> </tbody> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	
Drive Source and Fuel#	Drive Source	Fuel						
1	Combustion Engine	Gasoline						
Hybrid Indicator	No							
Multiple Fuel Storage	--	Multiple Fuel Combustion	--					
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--					
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--					
Off-board charge Capable Indicator	--							
Odometer Correction -- Initial	0	Odometer Correction Factor	1					
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor							
Odometer Correction Units	Miles							
Engine Code	FA-0100	Rated Horsepower	470					
Displacement (liters)	6.4							
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'						
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--					
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear					
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)					
Curb Weight (lbs)	6246	Equivalent Test Weight (pounds)	6500					
GVWR (lbs)	7800	N/V Ratio	28					
Axle Ratio	3.92							
Transmission Type	Automatic	# of Transmission Gears	8					
Transmission Lockup	Yes	Creep Gear	No					

Certification Summary Information Report

Test Group		VCRXT06.4570			Evaporative/Refueling Family		VCRXR0172RR0	
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	66.03	-0.0009	0.03824	17.97	0.3846	0.03189	21.5	
Cold CO	72.63	-0.001	0.04206	11.45	0.0729	0.03878	N/A	
US06	66.03	-0.0009	0.03824	17.97	0.3846	0.03189	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		callout: 23DA-T06.4FP1-1						

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Test #	PCR10073974	Test Procedure	25 - California fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	03/08/2022	Fuel	Gasoline
Fuel Batch ID	11081	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3907	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No
Test Results			
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	672.94	--	
FE BAG 1 (Bag 1 Fuel Economy)	12.59	12.59	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	765.01	--	
FE BAG 2 (Bag 2 Fuel Economy)	11.15	11.15	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	616.21	--	
FE BAG 3 (Bag 3 Fuel Economy)	13.78	13.78	
METHANE (CH4 - Methane)	0.008591	--	
CO (Carbon Monoxide)	1.877247	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.203	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.196	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.505	--	
MFR FE (Manufacturer Fuel Economy)	12.1	12.1	
NOX (Nitrogen Oxide)	0.009838	--	
N2O (Nitrous Oxide)	0.000548	--	
HC-NM (Non-methane Hydrocarbon)	0.020171	--	
NMOG (Non-methane organic gases)	0.022146	--	
PM (Particulate Matter)	0.000196	--	
HC-TOTAL (Total Hydrocarbon)	0.028359	--	

Certification Summary Information Report

Test Group		VCRXT06.4570			Evaporative/Refueling Family				VCRXR0172RR0			
		Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE						
		Carbon-Related Exhaust Emissions		708		999						
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		705.10557		--						
Manufacturer Test Comments		23DA-T06.4FP1-1 city 4k TowHaul Fixed cpE10										
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 160	CO	1.88	--	--	--	0.52	1	2.4	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	CO-COMP	2.74	--	--	--	0	1	2.7	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	CREE	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 160	METHANE	0.0086	--	--	--	0.0085	1	0.017	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	N2O	0.0005	--	--	--	0.0005	1	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0221	--	--	--	0.0094	1	0.032	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0319	--	--	--	--	--	0.042	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX-COMP	0.0354	--	--	--	0	1	0.035	0.090	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0098	--	--	--	0.0011	1	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0.0002	--	--	--	0	1	0	0.003	Pass
CA	150,000 miles	Other	CO	1.88	--	--	--	0.52	1	2.4	4.2	Pass
CA	150,000 miles	Other	CO-COMP	2.74	--	--	--	0	1	2.7	4.2	Pass
CA	150,000 miles	Other	CREE	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	METHANE	0.0086	--	--	--	0.0085	1	0.017	0.030	Pass
CA	150,000 miles	Other	N2O	0.0005	--	--	--	0.0005	1	0.001	0.010	Pass
CA	150,000 miles	Other	NMOG	0.0221	--	--	--	0.0094	1	0.032	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0319	--	--	--	--	--	0.042	0.160	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0354	--	--	--	0	1	0.035	0.090	Pass
CA	150,000 miles	Other	NOX	0.0098	--	--	--	0.0011	1	0.011	999.999	Pass
CA	150,000 miles	Other	PM	0.0002	--	--	--	0	1	0	0.003	Pass
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Test #	PCR10073978	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	03/11/2022	Fuel	Gasoline
Fuel Batch ID	10964	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3991	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	798.13	--
FE BAG 1 (Bag 1 Fuel Economy)	10.66	10.66
CO2 BAG 2 (Bag 2 Carbon Dioxide)	779.87	--
FE BAG 2 (Bag 2 Fuel Economy)	11.08	11.08
CO2 BAG 3 (Bag 3 Carbon Dioxide)	625.33	--
FE BAG 3 (Bag 3 Fuel Economy)	13.8	13.8
METHANE (CH4 - Methane)	0.018845	--
CO (Carbon Monoxide)	2.032336	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.8746	--
DT-EER (Drive Trace Energy Economy Rating)	0.2395	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.573	--
MFR FE (Manufacturer Fuel Economy)	11.6	11.6
NOX (Nitrogen Oxide)	0.030111	--
HC-NM (Non-methane Hydrocarbon)	0.269189	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	745	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	741.17161	--

Manufacturer Test Comments

23DA-T06.4FP1-1 city 4k TowHaul Fixed CCO

Certification Summary Information Report

Test Group		VCRXT06.4570				Evaporative/Refueling Family				VCRXR0172RR0		
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 160	CO	2.03	--	--	--	0.16	1	2.2	12.5	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	HC-NM	0.27	--	--	--	0.01	1	0.3	0.5	Pass
CA	50,000 miles	Other	CO	2.03	--	--	--	0.16	1	2.2	12.5	Pass

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0																																	
Test #	PCR10073975	Test Procedure	3 - HWFE																																	
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline																																	
Test Date	03/08/2022	Fuel	Gasoline																																	
Fuel Batch ID	11081	Fuel Calibration Number	1																																	
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																	
Verify Test Lab ID	CTC																																			
E10 Evaporative Test Measurement Method	--																																			
Test Start Odometer Reading	3918	Odometer Units	M																																	
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--																																	
State of Charge Delta	No																																			
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No																																	
Test Results																																				
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>METHANE (CH4 - Methane)</td> <td>0.001524</td> <td>--</td> </tr> <tr> <td>CO (Carbon Monoxide)</td> <td>0.4431</td> <td>--</td> </tr> <tr> <td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td> <td>-1.005</td> <td>--</td> </tr> <tr> <td>DT-EER (Drive Trace Energy Economy Rating)</td> <td>-0.393</td> <td>--</td> </tr> <tr> <td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td> <td>-1.729</td> <td>--</td> </tr> <tr> <td>MFR FE (Manufacturer Fuel Economy)</td> <td>19.9</td> <td>19.9</td> </tr> <tr> <td>NOX (Nitrogen Oxide)</td> <td>0.00374</td> <td>--</td> </tr> <tr> <td>HC-NM (Non-methane Hydrocarbon)</td> <td>0.001088</td> <td>--</td> </tr> <tr> <td>NMOG (Non-methane organic gases)</td> <td>0.00112</td> <td>--</td> </tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.00254</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	METHANE (CH4 - Methane)	0.001524	--	CO (Carbon Monoxide)	0.4431	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.005	--	DT-EER (Drive Trace Energy Economy Rating)	-0.393	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.729	--	MFR FE (Manufacturer Fuel Economy)	19.9	19.9	NOX (Nitrogen Oxide)	0.00374	--	HC-NM (Non-methane Hydrocarbon)	0.001088	--	NMOG (Non-methane organic gases)	0.00112	--	HC-TOTAL (Total Hydrocarbon)	0.00254	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																		
METHANE (CH4 - Methane)	0.001524	--																																		
CO (Carbon Monoxide)	0.4431	--																																		
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.005	--																																		
DT-EER (Drive Trace Energy Economy Rating)	-0.393	--																																		
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.729	--																																		
MFR FE (Manufacturer Fuel Economy)	19.9	19.9																																		
NOX (Nitrogen Oxide)	0.00374	--																																		
HC-NM (Non-methane Hydrocarbon)	0.001088	--																																		
NMOG (Non-methane organic gases)	0.00112	--																																		
HC-TOTAL (Total Hydrocarbon)	0.00254	--																																		
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated CREE/OPT-CREE</th> </tr> </thead> <tbody> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>430</td> <td>999</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	430	999																											
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE																																		
Carbon-Related Exhaust Emissions	430	999																																		
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated CO2</th> </tr> </thead> <tbody> <tr> <td>Carbon dioxide</td> <td>428.77017</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	428.77017	--																											
Test Result Name	Unrounded Test Result	Verify Calculated CO2																																		
Carbon dioxide	428.77017	--																																		
Manufacturer Test Comments	23DA-T06.4FP1-1 hwy 4k TowHaul Fixed cpE10																																			

Certification Summary Information Report

Test Group		VCRXT06.4570			Evaporative/Refueling Family					VCRXR0172RR0		
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 160	CREE	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0011	--	--	--	0.0094	1	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG+NOX	0.0048	--	--	--	--	--	0.015	0.160	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0037	--	--	--	0.0011	1	0.005	999.999	Pass
CA	150,000 miles	Other	CREE	999	--	--	--	0	1	999	--	--
CA	150,000 miles	Other	NMOG	0.0011	--	--	--	0.0094	1	0.01	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0048	--	--	--	--	--	0.015	0.160	Pass
CA	150,000 miles	Other	NOX	0.0037	--	--	--	0.0011	1	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	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Test #	PCR10073977	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	03/08/2022	Fuel	Gasoline
Fuel Batch ID	11081	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3946	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No
Test Results			
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	920.73	--	
FE BAG 1 (Bag 1 Fuel Economy)	9.24	9.24	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	505.58	--	
FE BAG 2 (Bag 2 Fuel Economy)	16.84	16.84	
METHANE (CH4 - Methane)	0.003282	--	
CO (Carbon Monoxide)	1.277635	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.298	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.587	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.153	--	
MFR FE (Manufacturer Fuel Economy)	14.2	14.2	
NOX (Nitrogen Oxide)	0.019329	--	
HC-NM (Non-methane Hydrocarbon)	0.008434	--	
NMOG (Non-methane organic gases)	0.008689	--	
PM (Particulate Matter)	0	--	
HC-TOTAL (Total Hydrocarbon)	0.011562	--	
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions	600	--	
Test Result Name	Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide	597.65384	--	

Certification Summary Information Report

Test Group		VCRXT06.4570				Evaporative/Refueling Family				VCRXR0172RR0		
Manufacturer Test Comments		23DA-T06.4FP1-1 us06 4k TowHaul Fixed cpE10										
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 160	CO	1.28	--	--	--	0.52	1	1.8	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.0087	--	--	--	0.0094	1	0.018	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0193	--	--	--	0.0011	1	0.02	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	PM	0	--	--	--	0	1	0	0.006	Pass
CA	150,000 miles	Other	CO	1.28	--	--	--	0.52	1	1.8	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0087	--	--	--	0.0094	1	0.018	999.999	Pass
CA	150,000 miles	Other	NOX	0.0193	--	--	--	0.0011	1	0.02	999.999	Pass
CA	150,000 miles	Other	PM	0	--	--	--	0	1	0	0.006	Pass

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Test #	PCR10073976	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	03/08/2022	Fuel	Gasoline
Fuel Batch ID	11081	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	CTC		
E10 Evaporative Test Measurement Method	--	Odometer Units	M
Test Start Odometer Reading	3962	Diesel Adjustment Factor Usage	--
4WD Test Dyno	No		
State of Charge Delta	No		
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)	0.008863	--	
CO (Carbon Monoxide)	3.235302	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.364	--	
DT-EER (Drive Trace Energy Economy Rating)	0.5843	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.577	--	
MFR FE (Manufacturer Fuel Economy)	11	11	
NOX (Nitrogen Oxide)	0.006912	--	
HC-NM (Non-methane Hydrocarbon)	0.008732	--	
NMOG (Non-methane organic gases)	0.008996	--	
HC-TOTAL (Total Hydrocarbon)	0.017179	--	
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions	778	--	
Test Result Name	Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide	773.00621	--	
Manufacturer Test Comments	23DA-T06.4FP1-1 sc03 4k TowHaul Fixed cpE10		

Certification Summary Information Report

Test Group		VCRXT06.4570				Evaporative/Refueling Family				VCRXR0172RR0		
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 160	CO	3.24	--	--	--	0.52	1	3.8	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NMOG	0.009	--	--	--	0.0094	1	0.018	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 160	NOX	0.0069	--	--	--	0.0011	1	0.008	999.999	Pass
CA	150,000 miles	Other	CO	3.24	--	--	--	0.52	1	3.8	999.9	Pass
CA	150,000 miles	Other	NMOG	0.009	--	--	--	0.0094	1	0.018	999.999	Pass
CA	150,000 miles	Other	NOX	0.0069	--	--	--	0.0011	1	0.008	999.999	Pass

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Fuel Properties			
Fuel Batch ID	10499	Fuel Calibration Number	1
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	Fuel Batch Calibration Date	08/07/2017
Fuel Batch Calibration Effective Date	08/07/2017	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.826	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.746
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17886
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	24670	Fuel Calibration Number	2
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	Fuel Batch Calibration Date	12/04/2015
Fuel Batch Calibration Effective Date	12/04/2015	Fuel Batch Calibration Ineffective Date	12/04/2030
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.749
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17963
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	10964	Fuel Calibration Number	1
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	06/18/2021
Fuel Batch Calibration Effective Date	06/18/2021	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.828	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	0
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.744
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17966
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	Weight Fraction CO2	--
Fuel Batch ID	11081	Fuel Calibration Number	1
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	02/14/2022
Fuel Batch Calibration Effective Date	02/14/2022	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.827	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--

Certification Summary Information Report

Test Group	VCRXT06.4570	Evaporative/Refueling Family	VCRXR0172RR0
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.746
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18009
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VCRXT06.4570			Evaporative/Refueling Family			VCRXR0172RR0		
Consolidated List of Standards										
Exhaust Standards										
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Other		
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	--	--	--	--	--	1	0	999	
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.160	
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999	
Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 160		
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	--	--	--	--	--	1	0.52	999.9	
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999	
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.006	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Other		
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	--	--	--	--	--	1	0.52	999.9	
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999	
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.006	

Certification Summary Information Report

Test Group	VCRXT06.4570				Evaporative/Refueling Family		VCRXR0172RR0		
Cert Region	California + CAA Section 177 states				Cert/In-Use Code		Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)				Standard Level		Other		
Fuel	Gasoline				Test Procedure		California 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	--	--	--	--	--	1	0.52	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.2
150,000 miles	CREE	--	--	--	--	--	1	0	999
150,000 miles	HCHO	--	--	--	--	--	1	0	0.004
150,000 miles	METHANE	--	--	--	--	--	1	0.0085	0.030
150,000 miles	N2O	--	--	--	--	--	1	0.0005	0.010
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.160
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.090
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.003

Cert Region	Federal				Cert/In-Use Code		Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)				Standard Level		Federal Tier 3 Bin 160		
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	--	--	--	--	--	1	0.52	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999

Certification Summary Information Report

Test Group	VCRXT06.4570			Evaporative/Refueling Family			VCRXR0172RR0		
Cert Region	California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Other		
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	--	--	--	--	--	1	0.52	999.9
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999

Cert Region	Federal			Cert/In-Use Code			Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 160		
Fuel	Gasoline			Test Procedure			California 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	--	--	--	--	--	1	0.52	4.2
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.2
150,000 miles	CREE	--	--	--	--	--	1	0	999
150,000 miles	HCHO	--	--	--	--	--	1	0	0.004
150,000 miles	METHANE	--	--	--	--	--	1	0.0085	0.030
150,000 miles	N2O	--	--	--	--	--	1	0.0005	0.010
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.160
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.090
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999
150,000 miles	PM	--	--	--	--	--	1	0	0.003

Certification Summary Information Report

Test Group	VCRXT06.4570			Evaporative/Refueling Family			VCRXR0172RR0		
Cert Region	Federal			Cert/In-Use Code			Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 160		
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	--	--	--	--	--	1	0	999
150,000 miles	NMOG	--	--	--	--	--	1	0.0094	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.160
150,000 miles	NOX	--	--	--	--	--	1	0.0011	999.999

Cert Region	Federal			Cert/In-Use Code			Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 160		
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	--	--	--	--	--	1	0.16	12.5
150,000 miles	HC-NM	--	--	--	--	--	1	0.01	0.5

Cert Region	California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Other		
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	--	--	--	--	--	1	0.16	12.5

Evaporative/Refueling Standards

Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		CA fuel 3-day evap.					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.009		

Certification Summary Information Report

Test Group		VCRXT06.4570		Evaporative/Refueling Family		VCRXR0172RR0	
Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL	--	0.020	0		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0		
Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		California Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0		
Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		California Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0		
Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		California fuel 2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057		
Evaporative/Refueling Family		VCRXR0172RR0		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		Other	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC	--	0.20	0		

Certification Summary Information Report

Test Group	VCRXT06.4570		Evaporative/Refueling Family		VCRXR0172RR0	
Evaporative/Refueling Family	VCRXR0172RR0		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code	Cert		Standard Level		Other	
Test Procedure	CA fuel 3-day evap.					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.009	
Evaporative/Refueling Family	VCRXR0172RR0		Cert Region		Federal	
Cert/In-Use Code	Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure	California fuel 2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.600	0.0057	
Evaporative/Refueling Family	VCRXR0172RR0		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	--	0.020	0	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0	
Evaporative/Refueling Family	VCRXR0172RR0		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	--	0.20	0	

Certification Summary Information Report

Test Group		VCRXT06.4570	Evaporative/Refueling Family		VCRXR0172RR0
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		VCRXT06.4570	Evaporative/Refueling Family		VCRXR0172RR0
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		VCRXT06.4570	Evaporative/Refueling Family		VCRXR0172RR0
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		VCRXT06.4570	Evaporative/Refueling Family		VCRXR0172RR0
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	