

**Certification Summary Information Report**

<b>Manufacturer</b>	FCA US LLC	<b>Manufacturer Code</b>	CRX
<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Certificate Number</b>	VCRXT03.6570-004	<b>CARB Executive Order #</b>	--
<b>Certificate Issue Date</b>	03/25/2026	<b>Certificate Revision Date</b>	--
<b>Certificate Effective Date</b>	03/25/2026	<b>Conditional Certificate</b>	No
<b>CSI Revision #</b>	--	<b>CSI Submission/Revision Date</b>	03/24/2026 04:11:59 PM
<b>Model Year</b>	2027		

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test Group Information</b>			
<b>CSI Type</b>	Update for Correction	<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	Multipoint/sequential fuel injection	No
<b>Hybrid Indicator</b>	No		
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	--
<b>Multiple Fuel Combustion</b>	--	<b>Off-board Charge Capable Indicator</b>	--
<b>Fuel Cell Indicator</b>	--	<b>EPA Vehicle Class</b>	LDT3, LDT4, LDT2
<b>Federal Clean Fuel Vehicle</b>	Yes	<b>Federal Clean Fuel Vehicle Standard</b>	LEV
<b>Federal Clean Fuel Vehicle ILEV</b>	No	<b>California Partial Zero Emissions Vehicle Indicator</b>	No
<b>Durability Group Name</b>	VCRXGPGNNF12	<b>Durability Group Equivalency Factor</b>	1.0
<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>	04/20/2026	<b>CAP2000 Conditional Certificate?</b>	No
<b>Independent Commercial Importer?</b>	No	<b>Alternative Fuel Converter Certificate?</b>	No
<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>	VCRXT03.6570
<b>Test Group OBD Compliance Level</b>	Partial - with deficiencies and penalty	<b>Number of Test Group OBD Deficiencies</b>	4
<b>OBD Deficiencies Comments</b>	1. SAE International (SAE) J1972-2 Implementation (Models: WD, WL, JL, JT) 2. Adaptive cruise control and parallel park systems default action, if equipped, (Models: RU, WD, WL, JL, JT) 3. Transmission Control Module (TCM) coordinated code clear (Models: RU) 4. Recent Operation Counters Reset. (Models: RU)		
<b>Mfr Test Group Comments</b>	T4iBIN30 E10 - City Litmus Value: 16.1; City Litmus Threshold: 15.4; Hwy Litmus Value: 20.9; Hwy Litmus Threshold: 20.1; E10 Fuel Batch Properties - Fuel Net Heat of Combustion and Fuel Carbon Mass fraction values will appear in E0 fields for Fuel Batch properties submissions prior to 6/13/25 Fuel Net Heat of Combustion units will be in BTU/LB 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 VCRXT03.6570		
<b>Mfr Exhaust / Evap Standards Comments</b>	--		

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0				
<b>Evaporative/Refueling Family Information</b>							
<b>Evaporative Summary Information Type</b>	New	<b>Submission/Correction Date</b>	01/07/2026 02:34:12 PM				
<b>Integrated ORVR?</b>	Yes	<b>Fuel(s)</b>	Gasoline				
<b>Multiple Fuel Storage</b>	--						
<b>Bladder Fuel Tank?</b>	No						
<b>Fuel Tank Material</b>	Plastic	<b>Fuel Tank Material Description</b>	hdpe/co-ex				
<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>	172	<b>Number of Primary Canisters</b>	1				
<b>Number of Bleed Canisters</b>	0	<b>Bleed Canister Total Working Capacity (grams)</b>	0				
<b>Mfr Evaporative/Refueling Family Comments</b>	This Evaporative Family is being certified with an evaporative FEL of 0.375 grams, generating credits as compared to the nominal standard of 0.400 grams.						
<b>Leak Family Details</b>							
<b>Leak Family Indicator</b>	Yes						
<b>Canister Bleed Test Indicator</b>	Yes	<b>Applicability of Evaporative Canister Bleed Test</b>	50 State				
<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>Leak Family Name</b>	<b>Applicability of Leak Family Requirements</b>	<b>Leak Family Standard (inches)</b>	<b>Leak Family Description</b>				
VCRXR0172PR0-LF1	50 State	0.02	--				
<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>
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	California + CAA Section 177 states	All Wheel Drive	Automatic	8	Yes
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	California + CAA Section 177 states	4-Wheel Drive	Manual	6	No
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
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	Federal	All Wheel Drive	Automatic	8	Yes
FCA US LLC	5 - Jeep	548 - Wrangler 4dr 4X4	Federal	4-Wheel Drive	Manual	6	No

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Engine Description</b>			
<b>Hybrid Type</b>	--	<b>Hybrid Description</b>	--
<b>Engine Type</b>	4-Stroke Spark Ignition	<b>Mfr Engine Description</b>	--
<b>Engine Block Arrangement</b>	V-shaped engine	<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>	6	<b>Mechanically Variable Compression Ratio Indicator</b>	N
<b>After Treatment Device(s) (ATD)</b>			
<b>ATD Number</b>	<b>ATD Type</b>	<b>ATD Precious Metal</b>	<b>Substrate Material</b>
1	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
<b>Mfr After Treatment Device (ATD) Comments</b>			
	THREE WAY CATALYST		
<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>	3.6	<b>Engine Rated Horsepower</b>	285
<b>Number of Inlet Valves Per Cylinder</b>	2	<b>Number of Exhaust Valves Per Cylinder</b>	2
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Number of Air Aspiration Devices</b>	0
<b>Air Aspiration Device Configuration</b>	--	<b>Charge Air Cooler Type</b>	N/A
<b>Air Aspiration Drive Method(s)</b>	--		
<b>Cylinder Deactivation</b>	No		
<b>Cylinder Deactivation Description</b>	--		
<b>Variable Valve Timing</b>	Yes		
<b>Variable Valve Timing System Description</b>	Cam Phaser		
<b>Variable Valve Lift?</b>	No		
<b>Variable Valve Lift System Description</b>	--		
<b>Number of Knock Sensors</b>	2	<b>Number of Air/Fuel Sensors</b>	4
<b>Air/Fuel Sensor # 1 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 1 Description</b>	--
<b>Air/Fuel Sensor # 2 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 2 Description</b>	--
<b>Air/Fuel Sensor # 3 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 3 Description</b>	--
<b>Air/Fuel Sensor # 4 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 4 Description</b>	--
<b>Mfr Air/Fuel Sensor Comments</b>	--		
<b>Exhaust Gas Recirculation</b>	Yes	<b>Cooled Exhaust Gas Recirculation</b>	Yes
<b>EGR Type</b>	Electronic/Electric	<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>	--		

## Certification Summary Information Report

Test Group	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
<b>Engine Configuration Number 2</b>			
Engine Displacement (liters)	3.6	Engine Rated Horsepower	287
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
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	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Cam Phaser		
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	Yes	Cooled Exhaust Gas Recirculation	Yes
EGR Type	Electronic/Electric	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	--		

## Certification Summary Information Report

Test Group	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
<b>Engine Configuration Number 3</b>			
Engine Displacement (liters)	3.6	Engine Rated Horsepower	293
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
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	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Cam Phaser		
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	Yes	Cooled Exhaust Gas Recirculation	Yes
EGR Type	Electronic/Electric	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	--		

**Certification Summary Information Report**

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Engine Configuration Number 4</b>			
<b>Engine Displacement (liters)</b>	3.6	<b>Engine Rated Horsepower</b>	295
<b>Number of Inlet Valves Per Cylinder</b>	2	<b>Number of Exhaust Valves Per Cylinder</b>	2
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Number of Air Aspiration Devices</b>	0
<b>Air Aspiration Device Configuration</b>	--	<b>Charge Air Cooler Type</b>	N/A
<b>Air Aspiration Drive Method(s)</b>	--		
<b>Cylinder Deactivation</b>	No		
<b>Cylinder Deactivation Description</b>	--		
<b>Variable Valve Timing</b>	Yes		
<b>Variable Valve Timing System Description</b>	Cam Phaser		
<b>Variable Valve Lift?</b>	No		
<b>Variable Valve Lift System Description</b>	--		
<b>Number of Knock Sensors</b>	2	<b>Number of Air/Fuel Sensors</b>	4
<b>Air/Fuel Sensor # 1 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 1 Description</b>	--
<b>Air/Fuel Sensor # 2 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 2 Description</b>	--
<b>Air/Fuel Sensor # 3 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 3 Description</b>	--
<b>Air/Fuel Sensor # 4 Type</b>	Heated oxygen	<b>Air/Fuel Sensor # 4 Description</b>	--
<b>Mfr Air/Fuel Sensor Comments</b>	--		
<b>Exhaust Gas Recirculation</b>	Yes	<b>Cooled Exhaust Gas Recirculation</b>	Yes
<b>EGR Type</b>	Electronic/Electric	<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>	--		

**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	SCRX10085920	SCRX10085922	SCRX10085922	SCRX10085926	SCRX10085925	SCRX10085921	18.6	228.2	27.2	286.1	1

**SFTP LEV-III Official Test Numbers**

Test Group Fuel	FTP	US06	SC03
Gasoline	SCRX10085920	SCRX10085922	SCRX10085926



## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
-------------------	--------------	------------------------------	--------------

**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)	
City/Highway/Evap	63.3	-0.2907	0.03622	29.46	-0.1608	0.03356	18.6
Cold CO	69.63	-0.3198	0.03984	27.83	-0.3769	0.03869	N/A
US06	63.3	-0.2907	0.03622	29.46	-0.1608	0.03356	N/A

Emission Control Device Comments

--

Manufacturer Test Vehicle Comments

callout: 25DA-T03.65P5-2

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test #</b>	<b>SCRX10085920</b>	<b>Test Procedure</b>	<b>25 - California fuel 2-day exhaust (w/can load)</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	04/18/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11303	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	6273	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	451.11	--
FE BAG 1 (Bag 1 Fuel Economy)	19.18	19.18
CO2 BAG 2 (Bag 2 Carbon Dioxide)	450.59	--
FE BAG 2 (Bag 2 Fuel Economy)	19.25	19.25
CO2 BAG 3 (Bag 3 Carbon Dioxide)	397.26	--
FE BAG 3 (Bag 3 Fuel Economy)	21.87	21.87
METHANE (CH4 - Methane)	0.007794	--
CO (Carbon Monoxide)	0.520399	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.382	--
DT-EER (Drive Trace Energy Economy Rating)	-0.848	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.098	--
MFR FE (Manufacturer Fuel Economy)	19.9	19.9
NOX (Nitrogen Oxide)	0.007992	--
N2O (Nitrous Oxide)	0.001615	--
HC-NM (Non-methane Hydrocarbon)	0.011103	--
NMOG (Non-methane organic gases)	0.012199	--
PM (Particulate Matter)	0.000111	--
HC-TOTAL (Total Hydrocarbon)	0.018344	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	437	999

## Certification Summary Information Report

Test Group		VCRXT03.6570		Evaporative/Refueling Family				VCRXR0172PR0				
Test Result Name		Unrounded Test Result				Verify Calculated CO2						
Carbon dioxide		436.03844				--						
<b>Manufacturer Test Comments</b>		25DA-T03.65P5-2 city 150k Auto ESSon Fixed E10										
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 30	CO	0.52	--	--	--	0	1	0.5	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	2.28	--	--	--	0	1	2.3	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CREE	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0078	--	--	--	0	1	0.008	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0016	--	--	--	0	1	0.002	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0122	--	--	--	0	1	0.012	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0202	--	--	--	--	--	0.02	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0224	--	--	--	0	1	0.022	0.040	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.008	--	--	--	0	1	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0001	--	--	--	0	1	0	0.003	Pass
CA	150,000 miles	Other	CO	0.52	--	--	--	0	1	0.5	1.0	Pass
CA	150,000 miles	Other	CO-COMP	2.28	--	--	--	0	1	2.3	4.2	Pass
CA	150,000 miles	Other	METHANE	0.0078	--	--	--	0	1	0.008	0.030	Pass
CA	150,000 miles	Other	N2O	0.0016	--	--	--	0	1	0.002	0.010	Pass
CA	150,000 miles	Other	NMOG	0.0122	--	--	--	0	1	0.012	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0202	--	--	--	--	--	0.02	0.030	Pass
CA	150,000 miles	Other	NMOG+NOX-COMP	0.0224	--	--	--	0	1	0.022	0.040	Pass
CA	150,000 miles	Other	NOX	0.008	--	--	--	0	1	0.008	999.999	Pass
CA	150,000 miles	Other	PM	0.0001	--	--	--	0	1	0	0.001	Pass

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

**Certification Summary Information Report**

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test #</b>	<b>SCRX10085925</b>	<b>Test Procedure</b>	<b>11 - Cold CO</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)
<b>Test Date</b>	04/28/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11292	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	6413	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	569.02	--
FE BAG 1 (Bag 1 Fuel Economy)	14.95	14.95
CO2 BAG 2 (Bag 2 Carbon Dioxide)	505.1	--
FE BAG 2 (Bag 2 Fuel Economy)	17.12	17.12
CO2 BAG 3 (Bag 3 Carbon Dioxide)	442.21	--
FE BAG 3 (Bag 3 Fuel Economy)	19.57	19.57
METHANE (CH4 - Methane)	0.025875	--
CO (Carbon Monoxide)	1.416991	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.6433	--
DT-EER (Drive Trace Energy Economy Rating)	0.4567	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9298	--
MFR FE (Manufacturer Fuel Economy)	17.2	17.2
NOX (Nitrogen Oxide)	0.025717	--
HC-NM (Non-methane Hydrocarbon)	0.196472	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	504	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	501.08744	--

**Manufacturer Test Comments** 25DA-T03.65P5-2 city 150k Auto ESSon Fixed CCO

## Certification Summary Information Report

Test Group		VCRXT03.6570			Evaporative/Refueling Family					VCRXR0172PR0		
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 30	CO	1.42	--	--	--	0	1	1.4	12.5	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	HC-NM	0.2	--	--	--	0	1	0.2	0.3	Pass
CA	50,000 miles	Other	CO	1.42	--	--	--	0	1	1.4	12.5	Pass

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test #</b>	<b>SCRX10085921</b>	<b>Test Procedure</b>	<b>3 - HWFE</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	04/18/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11303	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	6284	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.002349	--
CO (Carbon Monoxide)	0.319216	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.909	--
DT-EER (Drive Trace Energy Economy Rating)	-0.384	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.077	--
MFR FE (Manufacturer Fuel Economy)	29.4	29.4
NOX (Nitrogen Oxide)	0.002763	--
HC-NM (Non-methane Hydrocarbon)	0.000402	--
NMOG (Non-methane organic gases)	0.000414	--
HC-TOTAL (Total Hydrocarbon)	0.002667	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	296	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	294.5705	--

**Manufacturer Test Comments** 25DA-T03.65P5-2 hwy 150k Auto ESSon Fixed E10

## Certification Summary Information Report

Test Group		VCRXT03.6570			Evaporative/Refueling Family					VCRXR0172PR0		
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 30	CREE	999	--	--	--	0	1	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0004	--	--	--	0	1	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0032	--	--	--	--	--	0.003	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0028	--	--	--	0	1	0.003	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0004	--	--	--	0	1	0	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0032	--	--	--	--	--	0.003	0.030	Pass
CA	150,000 miles	Other	NOX	0.0028	--	--	--	0	1	0.003	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>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test #</b>	<b>SCRX10085922</b>	<b>Test Procedure</b>	<b>90 - US06</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	04/18/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11303	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CPG		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	6312	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

## Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	686.97	--
FE BAG 1 (Bag 1 Fuel Economy)	12.45	12.45
CO2 BAG 2 (Bag 2 Carbon Dioxide)	379.3	--
FE BAG 2 (Bag 2 Fuel Economy)	22.36	22.36
METHANE (CH4 - Methane)	0.013449	--
CO (Carbon Monoxide)	6.40656	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-3.383	--
DT-EER (Drive Trace Energy Economy Rating)	-1.702	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-6.194	--
MFR FE (Manufacturer Fuel Economy)	19	19
NOX (Nitrogen Oxide)	0.010247	--
HC-NM (Non-methane Hydrocarbon)	0.022427	--
NMOG (Non-methane organic gases)	0.023104	--
PM (Particulate Matter)	0.000362	--
HC-TOTAL (Total Hydrocarbon)	0.035397	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	457	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	447.42749	--

## Manufacturer Test Comments

25DA-T03.65P5-2 us06 150k Auto ESSon Fixed E10

## Certification Summary Information Report

Test Group		VCRXT03.6570			Evaporative/Refueling Family					VCRXR0172PR0		
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 30	CO	6.41	--	--	--	0	1	6.4	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0231	--	--	--	0	1	0.023	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0102	--	--	--	0	1	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0004	--	--	--	0	1	0	0.006	Pass
CA	150,000 miles	Other	CO	6.41	--	--	--	0	1	6.4	999.9	Pass
CA	150,000 miles	Other	NMOG	0.0231	--	--	--	0	1	0.023	999.999	Pass
CA	150,000 miles	Other	NOX	0.0102	--	--	--	0	1	0.01	999.999	Pass
CA	150,000 miles	Other	PM	0.0004	--	--	--	0	1	0	0.003	Pass

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Test #</b>	<b>SCRX10085926</b>	<b>Test Procedure</b>	<b>95 - SC03</b>
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	04/24/2024	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	11301	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	6337	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	No		
<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)	0.011898	--
CO (Carbon Monoxide)	0.826855	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.046	--
DT-EER (Drive Trace Energy Economy Rating)	-0.901	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.486	--
MFR FE (Manufacturer Fuel Economy)	18.3	18.3
NOX (Nitrogen Oxide)	0.007364	--
HC-NM (Non-methane Hydrocarbon)	0.008623	--
NMOG (Non-methane organic gases)	0.008883	--
HC-TOTAL (Total Hydrocarbon)	0.019922	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	479	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	477.76898	--

**Manufacturer Test Comments** 25DA-T03.65P5-2 sc03 rerun150k Auto ESSon RSF E10

## Certification Summary Information Report

Test Group		VCRXT03.6570			Evaporative/Refueling Family					VCRXR0172PR0		
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 30	CO	0.83	--	--	--	0	1	0.8	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0089	--	--	--	0	1	0.009	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0074	--	--	--	0	1	0.007	999.999	Pass
CA	150,000 miles	Other	NMOG	0.0089	--	--	--	0	1	0.009	999.999	Pass
CA	150,000 miles	Other	NMOG+NOX	0.0163	--	--	--	--	--	0.016	0.030	Pass
CA	150,000 miles	Other	NOX	0.0074	--	--	--	0	1	0.007	999.999	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
-------------------	--------------	-------------------------------------	--------------

**Emission Data Vehicle Information**

<b>Vehicle ID / Configuration</b>	L8JLJ2008 / 0	<b>Manufacturer Vehicle Configuration Number</b>	0
<b>Original Test Group Name</b>	JCRXT03.65P5	<b>Original Evaporative/Refueling Family</b>	JCRXR0172PP0
<b>Original Test Vehicle Model Year</b>	2018		
<b>Vehicle Model</b>			
<b>Represented Test Vehicle Make</b>	Jeep	<b>Represented Test Vehicle Model</b>	Wrangler Unlimited 4X4

**Leak Family Details**

<b>Leak Family Identifier</b>	--	<b>Leak Family Name</b>	--
-------------------------------	----	-------------------------	----

**Drive Sources and Fuel System Details**

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

<b>Hybrid Indicator</b>	No	<b>Multiple Fuel Combustion</b>	--
<b>Multiple Fuel Storage</b>	--	<b>Rechargeable Energy Storage System Indicator</b>	--
<b>Fuel Cell Indicator</b>	--	<b>Rechargeable Energy Storage System, if 'Other'</b>	--
<b>Rechargeable Energy Storage System</b>	--		
<b>Off-board charge Capable Indicator</b>	--		
<b>Odometer Correction -- Initial</b>	0	<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>	AA-600	<b>Rated Horsepower</b>	295
<b>Displacement (liters)</b>	3.6		
<b>Air Aspiration Method</b>	Naturally Aspirated	<b>Air Aspiration Method, if 'Other'</b>	
<b>Number of Air Aspiration Devices</b>	0	<b>Air Aspiration Device Configuration</b>	--
<b>Charge Air Cooler Type</b>	--	<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>	4258	<b>Equivalent Test Weight (pounds)</b>	4500
<b>GVWR (lbs)</b>	5300	<b>N/V Ratio</b>	29.1
<b>Axle Ratio</b>	4.1		
<b>Transmission Type</b>	Automatic	<b># of Transmission Gears</b>	8
<b>Transmission Lockup</b>	Yes	<b>Creeper Gear</b>	No

**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>	43.45	0.1331	0.03998	-30.05	0.4585	0.03169	20
<b>US06</b>	43.45	0.1331	0.03998	-30.05	0.4585	0.03169	N/A

## Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Emission Control Device Comments</b>	--		
<b>Manufacturer Test Vehicle Comments</b>	JL LWB EVAP, 18EV-T03.65P5-2; updated for 2wd dyno testing at EPA; FCA testing was in 4WD dyno mode.		
<b>Test #</b>	<b>JCRX91003702</b>	<b>Test Procedure</b>	<b>27 - California fuel 2-day evap</b>
<b>Exhaust Test # for this Evap Test</b>	JCRX91003690	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/27/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	24670	<b>Fuel Calibration Number</b>	2
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	--		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	4427.1	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

## Test Results

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	0.375	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2219	0.0057	0.228	0.375	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
-------------------	--------------	-------------------------------------	--------------

**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		
<b>Vehicle Model</b>			
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 Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
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	Creeper Gear	No

**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)	
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

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
<b>Emission Control Device Comments</b>	--		
<b>Manufacturer Test Vehicle Comments</b>	JL LWB 2WD Dyno mode, 18EV-T03.65P5-2		
<b>Test #</b>	<b>JCRX10050401</b>	<b>Test Procedure</b>	<b>38 - CA fuel 3-day evap.</b>
<b>Exhaust Test # for this Evap Test</b>	JCRX10050397	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	08/27/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	10499	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)		
<b>Test Start Odometer Reading</b>	4023	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	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	0.375	Pass
CA	150,000 miles	Other	HC-TOTAL-EQUIV	0.2922	0.009	0.301	0.375	Pass

### Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
-------------------	--------------	-------------------------------------	--------------

<b>Test #</b>	<b>JCRX10050400</b>	<b>Test Procedure</b>	<b>37 - California Fuel Running Loss</b>
<b>Exhaust Test # for this Evap Test</b>	JCRX10050397	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	08/27/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	10499	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
<b>Test Start Odometer Reading</b>	4006	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<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
<b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>	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

**Certification Summary Information Report**

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
-------------------	--------------	-------------------------------------	--------------

<b>Test #</b>	<b>JCRX10050402</b>	<b>Test Procedure</b>	<b>24 - Federal fuel refueling test (ORVR)</b>
<b>Exhaust Test # for this Evap Test</b>	JCRX10050398	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline
<b>Test Date</b>	09/09/2017	<b>Fuel</b>	Gasoline
<b>Fuel Batch ID</b>	10499	<b>Fuel Calibration Number</b>	1
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined
<b>Verify Test Lab ID</b>	CTC		
<b>E10 Evaporative Test Measurement Method</b>	--		
<b>Test Start Odometer Reading</b>	4135	<b>Odometer Units</b>	M
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--
<b>State of Charge Delta</b>	--		
<b>Drive Cycle Speed Tolerance Criteria</b>	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	<b>Road Speed Fan Usage</b>	No

**Test Results**

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)

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 Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0						
<b>Test #</b>	<b>JCRX10074149</b>	<b>Test Procedure</b>	<b>65 - Evap Canister Bleed Test</b>						
<b>Exhaust Test # for this Evap Test</b>	--	<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular						
<b>Test Date</b>	07/06/2017	<b>Fuel</b>	Gasoline						
<b>Fuel Batch ID</b>	--	<b>Fuel Calibration Number</b>	--						
<b>Vehicle Class</b>	N/A	<b>DF Type</b>	Mfr. Determined						
<b>Verify Test Lab ID</b>	IDIADA/STANT Spain								
<b>E10 Evaporative Test Measurement Method</b>	Calculated (1.08 x FID Total Hydrocarbons)								
<b>Test Start Odometer Reading</b>	0	<b>Odometer Units</b>	M						
<b>4WD Test Dyno</b>	No	<b>Diesel Adjustment Factor Usage</b>	--						
<b>State of Charge Delta</b>	--								
<b>Drive Cycle Speed Tolerance Criteria</b>	--	<b>Road Speed Fan Usage</b>	--						
<b>Test Results</b>									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Test Result Name</th> <th style="width: 30%;">Unrounded Test Result</th> <th style="width: 35%;">Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td style="text-align: center;">0.015</td> <td style="text-align: center;">--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.015	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.015	--							
<b>Manufacturer Test Comments</b>									
Test run on a rig with aged components (not actual vehicle)									
<b>Certification</b>									
<b>Region</b>	<b>Useful Life</b>	<b>Standard Level</b>	<b>Emission Name</b>	<b>Rounded Result</b>	<b>Add DF</b>	<b>Certification Level</b>	<b>Standard</b>	<b>Pass/Fail</b>	
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	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
<b>Fuel Properties</b>			
<b>Fuel Batch ID</b>	<b>24670</b>	<b>Fuel Calibration Number</b>	<b>2</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	12/04/2015
<b>Fuel Batch Calibration Effective Date</b>	12/04/2015	<b>Fuel Batch Calibration Ineffective Date</b>	12/04/2030
<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>	0.749
<b>Fuel Ethanol Volume Percent (%)</b>	9.8	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17963
<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>11303</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	02/08/2024
<b>Fuel Batch Calibration Effective Date</b>	02/08/2024	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.828	<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>	0.753
<b>Fuel Ethanol Volume Percent (%)</b>	9.7	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17975
<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>	0.828	<b>Weight Fraction CO2</b>	--
<b>Fuel Batch ID</b>	<b>10499</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	46 - CARB LEV3 E10 Regular Gasoline	<b>Fuel Batch Calibration Date</b>	08/07/2017
<b>Fuel Batch Calibration Effective Date</b>	08/07/2017	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.826	<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>	0.746
<b>Fuel Ethanol Volume Percent (%)</b>	9.8	<b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b>	17886
<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>11292</b>	<b>Fuel Calibration Number</b>	<b>1</b>
<b>Test Fuel Type</b>	28 - Cold CO E10 Regular Gasoline (Tier 3)	<b>Fuel Batch Calibration Date</b>	12/18/2023
<b>Fuel Batch Calibration Effective Date</b>	12/18/2023	<b>Fuel Batch Calibration Ineffective Date</b>	--
<b>Carbon Weight Fraction NMHC</b>	0.829	<b>Carbon Weight Fraction HC</b>	--
<b>Exhaust Carbon Weight Fraction</b>	--	<b>Fuel Methanol Volume Fraction</b>	0

## Certification Summary Information Report

Test Group	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17958
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>11301</b>	<b>Fuel Calibration Number</b>	<b>1</b>
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	Fuel Batch Calibration Date	02/08/2024
Fuel Batch Calibration Effective Date	02/08/2024	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	0.833	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 (%)	9.4	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17876
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.833	Weight Fraction CO2	--

### Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
-------------------	--------------	-------------------------------------	--------------

#### 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>	Other
<b>Fuel</b>	Gasoline	<b>Test Procedure</b>	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	NMOG	--	--	--	--	--	1	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030
150,000 miles	NOX	--	--	--	--	--	1	0	999.999

<b>Cert Region</b>	Federal	<b>Cert/In-Use Code</b>	Cert
<b>Vehicle Class</b>	LDT2 (LVW 3751-5750, GVW 0-6000)	<b>Standard Level</b>	Federal Tier 3 Bin 30
<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	CREE	--	--	--	--	--	1	0	999
150,000 miles	METHANE	--	--	--	--	--	1	0	0.030
150,000 miles	N2O	--	--	--	--	--	1	0	0.010

### Certification Summary Information Report

<b>Test Group</b>		VCRXT03.6570			<b>Evaporative/Refueling Family</b>			VCRXR0172PR0		
<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>			Other		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			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	1.0	
150,000 miles	CO-COMP	--	--	--	--	--	1	0	4.2	
150,000 miles	HCHO	--	--	--	--	--	1	0	0.004	
150,000 miles	METHANE	--	--	--	--	--	1	0	0.030	
150,000 miles	N2O	--	--	--	--	--	1	0	0.010	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.040	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.001	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<b>Fuel</b>		Gasoline			<b>Test Procedure</b>			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	1.0	
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	0.030	
150,000 miles	N2O	--	--	--	--	--	1	0	0.010	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	1	0	0.040	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.003	

### Certification Summary Information Report

<b>Test Group</b>		VCRXT03.6570			<b>Evaporative/Refueling Family</b>			VCRXR0172PR0		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<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	CO	--	--	--	--	--	1	0	999.9	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	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>			Other		
<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	METHANE	--	--	--	--	--	1	0	0.030	
150,000 miles	N2O	--	--	--	--	--	1	0	0.010	

<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>			Other		
<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	CO	--	--	--	--	--	1	0	999.9	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	
150,000 miles	PM	--	--	--	--	--	1	0	0.003	

### Certification Summary Information Report

<b>Test Group</b>		VCRXT03.6570			<b>Evaporative/Refueling Family</b>			VCRXR0172PR0		
<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<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	--	--	--	--	--	1	0	999.9	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<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	--	--	--	--	--	1	0	999	
150,000 miles	NMOG	--	--	--	--	--	1	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NOX	--	--	--	--	--	1	0	999.999	

<b>Cert Region</b>		Federal			<b>Cert/In-Use Code</b>			Cert		
<b>Vehicle Class</b>		LDT2 (LVW 3751-5750, GVW 0-6000)			<b>Standard Level</b>			Federal Tier 3 Bin 30		
<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	--	--	--	--	--	1	0	12.5	
150,000 miles	HC-NM	--	--	--	--	--	1	0	0.3	

### Certification Summary Information Report

<b>Test Group</b>		VCRXT03.6570			<b>Evaporative/Refueling Family</b>			VCRXR0172PR0		
<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>			Other		
<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	0	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	0	0.030	
150,000 miles	NOX	--	--	--	--	--	1	0	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>			Other		
<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	--	--	--	--	--	1	0	12.5	

#### Evaporative/Refueling Standards

<b>Evaporative/Refueling Family</b>		VCRXR0172PR0			<b>Cert Region</b>			Federal		
<b>Cert/In-Use Code</b>		Cert			<b>Standard Level</b>			Federal Tier 3 Evap		
<b>Test Procedure</b>		California fuel 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	--	0.375	0.0057					

<b>Evaporative/Refueling Family</b>		VCRXR0172PR0			<b>Cert Region</b>			California + CAA Section 177 states		
<b>Cert/In-Use Code</b>		Cert			<b>Standard Level</b>			Other		
<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	--	0.20	0					

<b>Evaporative/Refueling Family</b>		VCRXR0172PR0			<b>Cert Region</b>			Federal		
<b>Cert/In-Use Code</b>		Cert			<b>Standard Level</b>			Federal Tier 3 Evap		
<b>Test Procedure</b>		Evap Canister Bleed Test								
<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	--	0.020	0					

## Certification Summary Information Report

Test Group	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0		
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<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)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	California Fuel Running Loss				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	Federal		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Federal Tier 3 Evap		
<b>Test Procedure</b>	CA fuel 3-day evap.				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.375	0.009
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	Evap Canister Bleed Test				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	California fuel 2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.375	0.0057
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	California Fuel Running Loss				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0

### Certification Summary Information Report

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0		
<b>Evaporative/Refueling Family</b>	VCRXR0172PR0	<b>Cert Region</b>	California + CAA Section 177 states		
<b>Cert/In-Use Code</b>	Cert	<b>Standard Level</b>	Other		
<b>Test Procedure</b>	CA 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	--	0.375	0.009

## Certification Summary Information Report

Test Group	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
<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	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		VCRXT03.6570	Evaporative/Refueling Family		VCRXR0172PR0
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	
<b>Certification Region</b>					
CA	California + CAA Section 177 states		FA	Federal	
<b>Exhaust Emission Standard Level</b>					
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	VCRXT03.6570	Evaporative/Refueling Family	VCRXR0172PR0
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		
<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

**Certification Summary Information Report**

<b>Test Group</b>	VCRXT03.6570	<b>Evaporative/Refueling Family</b>	VCRXR0172PR0
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