

Certification Summary Information Report

Manufacturer	Jaguar Land Rover Limited	Manufacturer Code	JLX
Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Certificate Number	VJLXT03.0PTC-002	CARB Executive Order #	--
Certificate Issue Date	04/27/2026	Certificate Revision Date	--
Certificate Effective Date	04/27/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	04/02/2026 03:03:28 PM
Model Year	2027		

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Test Group Information

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

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition Direct fuel injection	No

Drive Source #2: Electric Motor

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Electricity	--	No

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	Yes
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VJLXGPGNNHTR	Durability Group Equivalency Factor	1
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	07/06/2026	CAP2000 Conditional Certificate?	No
Independent Commercial Importer?	No	Alternative Fuel Converter Certificate?	No
SFTP Federal Composite Compliance Identifier	Not Applicable	SFTP Tier 2 Composite CO Option	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VJLXT03.0PTC
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	1
OBD Deficiencies Comments	--		
Mfr Test Group Comments	Range Rover and Range Rover Sport PHEV		
Mfr Exhaust / Evap Standards Comments	--		

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	03/11/2026 07:04:05 AM				
Integrated ORVR?	No	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Metal	Fuel Tank Material Description	Stainless Steel				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	CVVL				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	175	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	0				
Mfr Evaporative/Refueling Family Comments	175g single canister Tier 3 HLDT / LEV3 HLDT Option 2 (500mg Whole-vehicle).						
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				
VJLXR0175M1C-001	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
Jaguar Land Rover Limited	2 - Land Rover	234 - Range Rover Sport P460 PHEV	Federal	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	235 - Range Rover Sport P550 PHEV	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	311 - Range Rover P550 PHEV	Federal	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	311 - Range Rover P550 PHEV	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	234 - Range Rover Sport P460 PHEV	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	235 - Range Rover Sport P550 PHEV	Federal	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	309 - Range Rover P460 PHEV	Federal	4-Wheel Drive	Semi-Automatic	8	Yes
Jaguar Land Rover Limited	2 - Land Rover	309 - Range Rover P460 PHEV	California + CAA Section 177 states	4-Wheel Drive	Semi-Automatic	8	Yes

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C	
Engine Description				
Hybrid Type	IC Engine/Electric Motor	Hybrid Description	--	
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--	
Engine Block Arrangement	Inline	Mfr Engine Block Arrangement Description	--	
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W20	
Number of Cylinders/Rotors	6	Mechanically Variable Compression Ratio Indicator	N	
After Treatment Device(s) (ATD)				
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith
Mfr After Treatment Device (ATD) Comments				
--				
Direct Ozone Reduction (DOR) Device				
Not Equipped				
Mfr Emission Control Device Comments				
--				
Engine Configuration Number 1				
Engine Displacement (liters)	3.0	Engine Rated Horsepower	460	
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2	
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	1	
Air Aspiration Device Configuration	Single	Charge Air Cooler Type	Liquid	
Air Aspiration Drive Method(s)	Mechanical			
Cylinder Deactivation	No			
Cylinder Deactivation Description	--			
Variable Valve Timing	Yes			
Variable Valve Timing System Description	Inlet and Exhaust Camshaft Phasing controlled by Engine Management System.			
Variable Valve Lift?	Yes			
Variable Valve Lift System Description	Continuously Variable Valve Lift system for the intake valves only			
Number of Knock Sensors	3	Number of Air/Fuel Sensors	3	
Air/Fuel Sensor # 1 Type	Heated air fuel	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	--	
Mfr Air/Fuel Sensor Comments	--			
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No	
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--	
Closed Loop Air Injection System	No			
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--	
Mfr Engine Configuration Comments	--			

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C								
Engine Configuration Number 2											
Engine Displacement (liters)	3.0	Engine Rated Horsepower	550								
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2								
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	1								
Air Aspiration Device Configuration	Single	Charge Air Cooler Type	Liquid								
Air Aspiration Drive Method(s)	Mechanical										
Cylinder Deactivation	No										
Cylinder Deactivation Description	--										
Variable Valve Timing	Yes										
Variable Valve Timing System Description	Inlet and Exhaust Camshaft Phasing controlled by Engine Management System.										
Variable Valve Lift?	Yes										
Variable Valve Lift System Description	Continuously Variable Valve Lift system for the intake valves only										
Number of Knock Sensors	3	Number of Air/Fuel Sensors	3								
Air/Fuel Sensor # 1 Type	Heated air fuel	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	--								
Mfr Air/Fuel Sensor Comments	--										
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No								
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--								
Closed Loop Air Injection System	No										
Air Injection Type	--	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	PJLX10075656	PJLX10075658	PJLX10075659	PJLX10075663	PJLX10075657	22.2	228.2	29.5	286.1	--	
Electricity	--	--	--	--	--	--	--	--	--	--	
SFTP LEV-III Official Test Numbers											
Test Group	Fuel	FTP	US06	SC03							
Electricity	--	--	--	--							
Gasoline	PJLX10075656	PJLX10075658	PJLX10075659	PJLX10075659							

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Official Charge Depleting Test Numbers			
Test Group Fuel	UDDS	Highway	
Electricity	RJLX10083080	RJLX10083081	
Gasoline	RJLX10083080	RJLX10083081	
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	398	Battery Energy Capacity	96
Battery Specific Energy	38.2	Battery Charger Type	On-Board
Number of Capacitors	--	Capacitor Rating (In Farads)	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Both	Driver Controlled Regenerative Braking	No
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	DC Permanent Magnet, brushless	Rated Motor/Generator Power	105
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	Battery nominal capacity is 96 Ah, rated capacity is 75 Ah.		

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Emission Data Vehicle Information

Vehicle ID / Configuration	3KNHT319 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	PJLXT03.0PTC	Original Evaporative/Refueling Family	PJLXR0175M1C
Original Test Vehicle Model Year	2023		

Vehicle Model

Represented Test Vehicle Make	LAND ROVER	Represented Test Vehicle Model	New Range Rover PHEV
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Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Electric Motor	Electricity
2	Combustion Engine	Gasoline

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
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	3.0AJPH-23	Rated Horsepower	510
Displacement (liters)	3		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel
Charge Air Cooler Type	Liquid	Drive Mode While Testing	4-Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	6275	Equivalent Test Weight (pounds)	6500
GVWR (lbs)	7605	N/V Ratio	26.8
Axle Ratio	3.73		
Transmission Type	Automatic	# of Transmission Gears	1
Transmission Lockup	Yes	Creeper Gear	No

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Test Group		VJLXT03.0PTC			Evaporative/Refueling Family		VJLXR0175M1C	
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	66.274	-0.42092	0.03418	9.554	-0.51339	0.032338	17.4	
Cold CO	72.901	-0.46302	0.0376	9.554	-0.51339	0.032338	N/A	
US06	66.274	-0.42092	0.03418	9.554	-0.51339	0.032338	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		New Range Rover 3.0L I6 PHEV.						

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Test Group	VJLXT03.OPTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	PJLX10075656	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	02/19/2022	Fuel	Gasoline
Fuel Batch ID	40724	Fuel Calibration Number	6681
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	Jaguar Land Rover Limited		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4632	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	434.055	--	
FE BAG 1 (Bag 1 Fuel Economy)	20.035	20.035	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	358.988	--	
FE BAG 2 (Bag 2 Fuel Economy)	24.252	24.252	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	343.509	--	
FE BAG 3 (Bag 3 Fuel Economy)	25.343	25.343	
CO2 BAG 4 (Bag 4 Carbon Dioxide)	365.014	--	
FE BAG 4 (Bag 4 Fuel Economy)	23.855	23.855	
METHANE (CH4 - Methane)	0.0029	--	
CO (Carbon Monoxide)	0.2036	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.325	--	
DT-EER (Drive Trace Energy Economy Rating)	-2.058	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.968	--	
MFR FE (Manufacturer Fuel Economy)	23.212	23.212	
NOX (Nitrogen Oxide)	0.01	--	
N2O (Nitrous Oxide)	0.0006	--	
HC-NM (Non-methane Hydrocarbon)	0.0075	--	
NMOG (Non-methane organic gases)	0.0078	--	
PM (Particulate Matter)	0.0007	--	
HC-TOTAL (Total Hydrocarbon)	0.0098	--	

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Test Group		VJLXT03.OPTC			Evaporative/Refueling Family				VJLXR0175M1C			
		Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE						
		Carbon-Related Exhaust Emissions		375		999						
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		374.9495		--						
Manufacturer Test Comments		New Range Rover 3.0L PHEV Charge Sustain FTP75 (2xUDDS) E10 Premium. MFR Test No. C1 2022-02-19 01. 285/45R22 Tires.										
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	120,000 miles	Federal Tier 3 Bin 30	CREE	999	--	--	--	0	--	999	--	--
Fed	120,000 miles	Federal Tier 3 Bin 30	METHANE	0.0029	--	--	--	0.0029	--	0.006	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	N2O	0.0006	--	--	--	0.0007	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.2	--	--	--	0.43	--	0.6	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0078	--	1.1	--	0.0024	--	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0178	--	--	--	--	--	0.02	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.01	--	--	--	0	--	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0007	--	--	--	0	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.2	--	--	--	0.43	--	0.6	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	N2O	0.0006	--	--	--	0.0007	--	0.001	0.010	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0078	--	1.1	--	0.0024	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0178	--	--	--	--	--	0.02	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.01	--	--	--	0	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0007	--	--	--	0	--	0.001	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	VJLXT03.OPTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	PJLX10075663	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	03/11/2022	Fuel	Gasoline
Fuel Batch ID	40724	Fuel Calibration Number	6681
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	MIRA Ltd		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5635	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	556.74	--	
FE BAG 1 (Bag 1 Fuel Economy)	15.607	15.607	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	403.6	--	
FE BAG 2 (Bag 2 Fuel Economy)	21.584	21.584	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	385.45	--	
FE BAG 3 (Bag 3 Fuel Economy)	22.596	22.596	
METHANE (CH4 - Methane)	0.0031	--	
CO (Carbon Monoxide)	0.3067	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.49	--	
DT-EER (Drive Trace Energy Economy Rating)	-1.79	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.13	--	
MFR FE (Manufacturer Fuel Economy)	20.2308	20.2308	
NOX (Nitrogen Oxide)	0.009	--	
HC-NM (Non-methane Hydrocarbon)	0.0143	--	
NMOG (Non-methane organic gases)	0.0157	--	
PM (Particulate Matter)	0	--	
HC-TOTAL (Total Hydrocarbon)	0.0171	--	
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions	430	--	

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Test Group		VJLXT03.0PTC				Evaporative/Refueling Family				VJLXR0175M1C			
		Test Result Name		Unrounded Test Result				Verify Calculated CO2					
		Carbon dioxide		430.28				--					
Manufacturer Test Comments		New Range Rover 3.0L PHEV 285/45R22 Tires.											
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	0.31	--	--	--	0.013	--	0.3	12.5	Pass	
Fed	120,000 miles	Federal Tier 3 Bin 30	HC-NM	0.01	--	--	--	0.0017	--	0	0.3	Pass	
CA	50,000 miles	California LEV-III SULEV30	CO	0.31	--	--	--	0.013	--	0.3	12.5	Pass	

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	PJLX10076934	Test Procedure	51 - CA fuel 50 Deg(F) exhaust test
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	04/01/2022	Fuel	Gasoline
Fuel Batch ID	40724	Fuel Calibration Number	6681
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)	DF Type	Mfr. Determined
Verify Test Lab ID	MIRA Ltd		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5652	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	475.57	--
FE BAG 1 (Bag 1 Fuel Economy)	18.294	18.294
CO2 BAG 2 (Bag 2 Carbon Dioxide)	355.12	--
FE BAG 2 (Bag 2 Fuel Economy)	24.534	24.534
CO2 BAG 3 (Bag 3 Carbon Dioxide)	379.42	--
FE BAG 3 (Bag 3 Fuel Economy)	22.952	22.952
METHANE (CH4 - Methane)	0.0023	--
CO (Carbon Monoxide)	0.197	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.62	--
DT-EER (Drive Trace Energy Economy Rating)	-1.98	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.93	--
MFR FE (Manufacturer Fuel Economy)	22.5127	22.5127
NOX (Nitrogen Oxide)	0.0091	--
HC-NM (Non-methane Hydrocarbon)	0.0087	--
NMOG (Non-methane organic gases)	0.0096	--
PM (Particulate Matter)	0.00063	--
HC-TOTAL (Total Hydrocarbon)	0.0108	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	387	--

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Test Group		VJLXT03.0PTC				Evaporative/Refueling Family				VJLXR0175M1C		
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		386.81			--					
Manufacturer Test Comments		New Range Rover 3.0L PHEV 285/45R22 Tires.										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	50,000 miles	California LEV-III SULEV30	NMOG	0.0096	--	1.1	--	0.0024	--	0.012	999.999	Pass
CA	50,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0187	--	--	--	--	--	0.021	0.060	Pass
CA	50,000 miles	California LEV-III SULEV30	NOX	0.0091	--	--	--	0	--	0.009	999.999	Pass

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Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C																																				
Test #	PJLX10075657	Test Procedure	3 - HWFE																																				
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline																																				
Test Date	02/19/2022	Fuel	Gasoline																																				
Fuel Batch ID	40724	Fuel Calibration Number	6681																																				
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	Jaguar Land Rover Limited																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	4652	Odometer Units	M																																				
4WD Test Dyno	Yes	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	Yes																																				
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Manufacturer Test Comments	New Range Rover 3.0L MHEV Highway. MFR Test No. C1 2022-02-19 02 285/45R22 Tires.																																						

Certification Summary Information Report

Test Group		VJLXT03.OPTC			Evaporative/Refueling Family					VJLXR0175M1C		
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	120,000 miles	Federal Tier 3 Bin 30	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0011	--	1.1	--	0.0024	--	0.004	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0029	--	--	--	--	--	0.005	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0018	--	--	--	0	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0011	--	1.1	--	0.0024	--	0.004	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0029	--	--	--	--	--	0.005	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0018	--	--	--	0	--	0.002	99.999	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	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	PJLX10075658	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	05/05/2022	Fuel	Gasoline
Fuel Batch ID	40724	Fuel Calibration Number	6681
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	Jaguar Land Rover Limited		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5649	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	502.908	--	
FE BAG 1 (Bag 1 Fuel Economy)	17.286	17.286	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	354.546	--	
FE BAG 2 (Bag 2 Fuel Economy)	24.528	24.528	
CO (Carbon Monoxide)	0.4605	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.668	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.965	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-4.699	--	
MFR FE (Manufacturer Fuel Economy)	22.443	22.443	
NOX (Nitrogen Oxide)	0.0044	--	
HC-NM (Non-methane Hydrocarbon)	0.0001	--	
NMOG (Non-methane organic gases)	0.0001	--	
PM (Particulate Matter)	0.0008	--	
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0045	--	
HC-TOTAL (Total Hydrocarbon)	0.0005	--	
Test Result Name	Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide	387.4464	--	
Manufacturer Test Comments			
New Range Rover 3.0L PHEV US06. MFR Test No. C6 2022-05-05 15 285/45R22 Tires.			

Certification Summary Information Report

Test Group		VJLXT03.0PTC				Evaporative/Refueling Family				VJLXR0175M1C		
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	0.46	--	--	--	0	--	0.5	9.6	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0001	--	1.03	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0045	--	--	--	--	--	0.009	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0044	--	--	--	0.0044	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.46	--	--	--	0	--	0.5	9.6	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0001	--	1.03	--	0	--	0	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0045	--	--	--	--	--	0.009	0.050	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0044	--	--	--	0.0044	--	0.009	99.999	Pass

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	PJLX10075659	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	02/19/2022	Fuel	Gasoline
Fuel Batch ID	40724	Fuel Calibration Number	6681
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	Jaguar Land Rover Limited		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4688	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO (Carbon Monoxide)	0.3598	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	99.99	--
DT-EER (Drive Trace Energy Economy Rating)	99.99	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	99.99	--
MFR FE (Manufacturer Fuel Economy)	20.403	20.403
NOX (Nitrogen Oxide)	0.0028	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	426.4061	--

Manufacturer Test Comments

New Range Rover 3.0L PHEV. MFR Test No. C1 2022-02-19 05. 285/45R22 Tires.

Certification Summary Information Report

Test Group		VJLXT03.0PTC				Evaporative/Refueling Family				VJLXR0175M1C		
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	0.36	--	--	--	0	--	0.4	3.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.03	--	0.0001	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0028	--	--	--	--	--	0.005	0.020	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0028	--	--	--	0.0018	--	0.005	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.36	--	--	--	0	--	0.4	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0	--	1.03	--	0.0001	--	0	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0028	--	--	--	--	--	0.005	0.020	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0028	--	--	--	0.0018	--	0.005	99.999	Pass

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Emission Data Vehicle Information

Vehicle ID / Configuration	3KR TT017 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	RJLXT03.0PTC	Original Evaporative/Refueling Family	RJLXR0175M1C
Original Test Vehicle Model Year	2024		

Vehicle Model

Represented Test Vehicle Make	LAND ROVER	Represented Test Vehicle Model	New Range Rover PHEV
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Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline
2	Electric Motor	Electricity

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
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	3.0AJPM-23	Rated Horsepower	460
Displacement (liters)	3		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single
Charge Air Cooler Type	Liquid	Drive Mode While Testing	4-Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	6335	Equivalent Test Weight (pounds)	6500
GVWR (lbs)	7670	N/V Ratio	26.8
Axle Ratio	3.73		
Transmission Type	Automatic	# of Transmission Gears	1
Transmission Lockup	Yes	Creep Gear	No

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family		VJLXR0175M1C	
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	59.9	-0.223	0.03245	-0.697	-0.21259	0.02953	17.3	
Cold CO	65.89	-0.245	0.0357	-0.697	-0.21259	0.02953	N/A	
US06	59.9	-0.223	0.03245	-0.697	-0.21259	0.02953	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		Range Rover 3.0L I6 PHEV. 275/50R21 Michelin Primacy Tires.						

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Test #	RJLX10082532	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/10/2022	Fuel	Gasoline
Fuel Batch ID	44900	Fuel Calibration Number	9289
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	Jaguar Land Rover Limited		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3915	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	389.1307	--
FE BAG 1 (Bag 1 Fuel Economy)	22.8381	22.8381
CO2 BAG 2 (Bag 2 Carbon Dioxide)	325.8317	--
FE BAG 2 (Bag 2 Fuel Economy)	27.2748	27.2748
CO2 BAG 3 (Bag 3 Carbon Dioxide)	330.3693	--
FE BAG 3 (Bag 3 Fuel Economy)	26.9002	26.9002
CO2 BAG 4 (Bag 4 Carbon Dioxide)	324.1843	--
FE BAG 4 (Bag 4 Fuel Economy)	27.4134	27.4134
METHANE (CH4 - Methane)	0.0026	--
CO (Carbon Monoxide)	0.2007	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.166	--
DT-EER (Drive Trace Energy Economy Rating)	-0.95	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.223	--
MFR FE (Manufacturer Fuel Economy)	26	26
NOX (Nitrogen Oxide)	0.0104	--
N2O (Nitrous Oxide)	0.0006	--
HC-NM (Non-methane Hydrocarbon)	0.0067	--
NMOG (Non-methane organic gases)	0.0069	--
PM (Particulate Matter)	0.0008	--
HC-TOTAL (Total Hydrocarbon)	0.0087	--

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family				VJLXR0175M1C			
		Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE						
		Carbon-Related Exhaust Emissions		342		342						
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		342		--						
Manufacturer Test Comments		Range Rover 3.0L PHEV Charge Sustain 2xUDDS E0. MFR Test No. C6 2023-08-10 10. 275/50R21 Michelin Primacy Tires. NEC correction applied. UDDS 1 factor: -2.7592, UDDS 2 factor: -1.5155										
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	0.2	--	--	--	0.43	--	0.6	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CREE	342	--	--	--	0	--	342	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0026	--	--	--	0.0029	--	0.006	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0006	--	--	--	0.0007	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0069	--	1.04	--	0.0024	--	0.009	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0173	--	--	--	--	--	0.02	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0104	--	--	--	0	--	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0008	--	--	--	0	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.2	--	--	--	0.43	--	0.6	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	METHANE	0.0026	--	--	--	0.0029	--	0.006	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	N2O	0.0006	--	--	--	0.0007	--	0.001	0.010	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0069	--	1.04	--	0.0024	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0173	--	--	--	--	--	0.02	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0104	--	--	--	0	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0008	--	--	--	0	--	0.001	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	VJLXT03.OPTC	Evaporative/Refueling Family	VJLXR0175M1C																																				
Test #	RJLX10082533	Test Procedure	3 - HWFE																																				
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline																																				
Test Date	08/10/2022	Fuel	Gasoline																																				
Fuel Batch ID	44900	Fuel Calibration Number	9289																																				
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	Jaguar Land Rover Limited																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	3915	Odometer Units	M																																				
4WD Test Dyno	Yes	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	Yes																																				
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Manufacturer Test Comments	Range Rover 3.0L MHEV Highway. MFR Test No. C6 2023-08-10 11 275/50R21 Michelin Primacy Tires.																																						

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family					VJLXR0175M1C		
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	120,000 miles	Federal Tier 3 Bin 30	CREE	256	--	--	--	0	--	256	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.1	--	0.0024	--	0.002	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0005	--	--	--	--	--	0.003	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0005	--	--	--	0	--	0	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0	--	1.1	--	0.0024	--	0.002	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0005	--	--	--	--	--	0.003	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0005	--	--	--	0	--	0	99.999	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	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C																																																
Test #	RJLX10082534	Test Procedure	90 - US06																																																
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline																																																
Test Date	08/10/2023	Fuel	Gasoline																																																
Fuel Batch ID	44900	Fuel Calibration Number	9289																																																
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000), LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																																
Verify Test Lab ID	Jaguar Land Rover Limited																																																		
E10 Evaporative Test Measurement Method	--																																																		
Test Start Odometer Reading	3951	Odometer Units	M																																																
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																																																
State of Charge Delta	Yes																																																		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																																
Test Results																																																			
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Manufacturer Test Comments	Range Rover MFR Test No. C6 2023-08-10 12. 275/50R21 Michelin Primacy Tires. US06.																																																		

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family					VJLXR0175M1C		
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	0.18	--	--	--	0	--	0.2	9.6	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.03	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0057	--	--	--	--	--	0.01	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0057	--	--	--	0.0044	--	0.01	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.18	--	--	--	0	--	0.2	9.6	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0	--	1.03	--	0	--	0	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0057	--	--	--	--	--	0.01	0.050	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0057	--	--	--	0.0044	--	0.01	99.999	Pass

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Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	7.475	
	Average System Voltage	442.06	
	Carbon Monoxide	0	
	Carbon dioxide	0.089	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	-0.863	
	Drive Trace Energy Economy Rating	-1.515	
	Drive Trace Inertia Work Ratio Rating	-1.224	
	Integrated Amp-hours	13.555	
	Manufacturer Fuel Economy	999.999	
	Nitrogen Oxide	0	
	Non-methane Hydrocarbon	0.000107	
	Non-methane organic gases	0.00011	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.000118	

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.51
Average System Voltage	432.84
Carbon Monoxide	0
Carbon dioxide	0.107
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.317
Drive Trace Energy Economy Rating	-2.063
Drive Trace Inertia Work Ratio Rating	-2.078
Integrated Amp-hours	20.373
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.00019

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	7.502	
	Average System Voltage	424.65	
	Carbon Monoxide	0	
	Carbon dioxide	0.094	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	-1.317	
	Drive Trace Energy Economy Rating	-2.063	
	Drive Trace Inertia Work Ratio Rating	-2.078	
	Integrated Amp-hours	27.337	
	Manufacturer Fuel Economy	999.999	
	Nitrogen Oxide	0	
	Non-methane Hydrocarbon	0	
	Non-methane organic gases	0	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.00019	

Charge Depleting Bag/Phase #5

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.464
Average System Voltage	417.77
Carbon Monoxide	0
Carbon dioxide	0.064
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.935
Drive Trace Energy Economy Rating	-1.557
Drive Trace Inertia Work Ratio Rating	-1.393
Integrated Amp-hours	34.222
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0.000064
Non-methane Hydrocarbon	0.000498
Non-methane organic gases	0.000513
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.00024

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	7.474	
	Average System Voltage	409.65	
	Carbon Monoxide	0	
	Carbon dioxide	0.089	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	-0.935	
	Drive Trace Energy Economy Rating	-1.557	
	Drive Trace Inertia Work Ratio Rating	-1.393	
	Integrated Amp-hours	40.704	
	Manufacturer Fuel Economy	999.999	
	Nitrogen Oxide	0.000083	
	Non-methane Hydrocarbon	0	
	Non-methane organic gases	0	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.000119	

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.508
Average System Voltage	401.99
Carbon Monoxide	0.001007
Carbon dioxide	0.096
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.028
Drive Trace Energy Economy Rating	-1.48
Drive Trace Inertia Work Ratio Rating	-1.474
Integrated Amp-hours	47.887
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.001065
Non-methane organic gases	0.001097
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000211

Charge Depleting Bag/Phase #8

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	7.501	
	Average System Voltage	395.11	
	Carbon Monoxide	0	
	Carbon dioxide	0.065	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	-1.028	
	Drive Trace Energy Economy Rating	-1.48	
	Drive Trace Inertia Work Ratio Rating	-1.474	
	Integrated Amp-hours	55.075	
	Manufacturer Fuel Economy	999.999	
	Nitrogen Oxide	0.000094	
	Non-methane Hydrocarbon	0.000219	
	Non-methane organic gases	0.000215	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.000093	

Charge Depleting Bag/Phase #9

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.478
Average System Voltage	387.63
Carbon Monoxide	0
Carbon dioxide	0.065
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.398
Drive Trace Energy Economy Rating	-1.529
Drive Trace Inertia Work Ratio Rating	-2.021
Integrated Amp-hours	62.461
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0.000253
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000162

Charge Depleting Bag/Phase #10

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	7.479	
	Average System Voltage	380.18	
	Carbon Monoxide	0.392744	
	Carbon dioxide	138.858	
	Carbon-Related Exhaust Emissions	139	
	Drive Trace Absolute Speed Change Rating	-1.398	
	Drive Trace Energy Economy Rating	-1.529	
	Drive Trace Inertia Work Ratio Rating	-2.021	
	Integrated Amp-hours	67.379	
	Manufacturer Fuel Economy	63.982	
	Nitrogen Oxide	0.013448	
	Non-methane Hydrocarbon	0.039006	
	Non-methane organic gases	0.040177	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.051203	

Charge Depleting Bag/Phase #11

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.466
Average System Voltage	381.4
Carbon Monoxide	0.099755
Carbon dioxide	336.688
Carbon-Related Exhaust Emissions	337
Drive Trace Absolute Speed Change Rating	-1.618
Drive Trace Energy Economy Rating	-1.882
Drive Trace Inertia Work Ratio Rating	-2.517
Integrated Amp-hours	67.178
Manufacturer Fuel Economy	26.522
Nitrogen Oxide	0.003467
Non-methane Hydrocarbon	0.002518
Non-methane organic gases	0.002594
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.00694

Charge Depleting Bag/Phase #12

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C																																
	<table><tr><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>Actual Distance Driven (miles)</td><td>7.444</td></tr><tr><td>Average System Voltage</td><td>382.42</td></tr><tr><td>Carbon Monoxide</td><td>0.180395</td></tr><tr><td>Carbon dioxide</td><td>351.197</td></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>351</td></tr><tr><td>Drive Trace Absolute Speed Change Rating</td><td>-1.618</td></tr><tr><td>Drive Trace Energy Economy Rating</td><td>-1.882</td></tr><tr><td>Drive Trace Inertia Work Ratio Rating</td><td>-2.517</td></tr><tr><td>Integrated Amp-hours</td><td>66.837</td></tr><tr><td>Manufacturer Fuel Economy</td><td>25.419</td></tr><tr><td>Nitrogen Oxide</td><td>0.006872</td></tr><tr><td>Non-methane Hydrocarbon</td><td>0</td></tr><tr><td>Non-methane organic gases</td><td>0</td></tr><tr><td>Non-methane organic gases plus Nitrogen Oxides</td><td>999.999</td></tr><tr><td>Total Hydrocarbon</td><td>0.000605</td></tr></table>		Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	7.444	Average System Voltage	382.42	Carbon Monoxide	0.180395	Carbon dioxide	351.197	Carbon-Related Exhaust Emissions	351	Drive Trace Absolute Speed Change Rating	-1.618	Drive Trace Energy Economy Rating	-1.882	Drive Trace Inertia Work Ratio Rating	-2.517	Integrated Amp-hours	66.837	Manufacturer Fuel Economy	25.419	Nitrogen Oxide	0.006872	Non-methane Hydrocarbon	0	Non-methane organic gases	0	Non-methane organic gases plus Nitrogen Oxides	999.999	Total Hydrocarbon	0.000605	
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	Nitrogen Oxide	0.006872																																	
	Non-methane Hydrocarbon	0																																	
	Non-methane organic gases	0																																	
	Non-methane organic gases plus Nitrogen Oxides	999.999																																	
	Total Hydrocarbon	0.000605																																	

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Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.251
Average System Voltage	434.77
Carbon Monoxide	0
Carbon dioxide	0.228
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-0.05
Drive Trace Energy Economy Rating	0.12
Drive Trace Inertia Work Ratio Rating	0.17
Integrated Amp-hours	16.854
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0.000057
Non-methane Hydrocarbon	0.000249
Non-methane organic gases	0.000257
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000039

Charge Depleting Bag/Phase #3

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.265
Average System Voltage	423.17
Carbon Monoxide	0.000515
Carbon dioxide	0.069
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	-1.11
Drive Trace Energy Economy Rating	-0.63
Drive Trace Inertia Work Ratio Rating	-1.39
Integrated Amp-hours	25.433
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0.000066
Non-methane Hydrocarbon	0.000205
Non-methane organic gases	0.000212
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000078

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	10.276	
	Average System Voltage	414.85	
	Carbon Monoxide	0.00044	
	Carbon dioxide	0.063	
	Carbon-Related Exhaust Emissions	0	
	Drive Trace Absolute Speed Change Rating	-0.72	
	Drive Trace Energy Economy Rating	-0.52	
	Drive Trace Inertia Work Ratio Rating	-0.74	
	Integrated Amp-hours	34.029	
	Manufacturer Fuel Economy	999.999	
	Nitrogen Oxide	0	
	Non-methane Hydrocarbon	0	
	Non-methane organic gases	0	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.000057	

Charge Depleting Bag/Phase #5

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.267
Average System Voltage	404.99
Carbon Monoxide	0
Carbon dioxide	0.042
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.3
Drive Trace Energy Economy Rating	-0.34
Drive Trace Inertia Work Ratio Rating	0.56
Integrated Amp-hours	42.877
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.000006
Non-methane organic gases	0.000007
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000069

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.258
Average System Voltage	394.91
Carbon Monoxide	0.001348
Carbon dioxide	0.062
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.84
Drive Trace Energy Economy Rating	-0.23
Drive Trace Inertia Work Ratio Rating	1.15
Integrated Amp-hours	51.727
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000032

Charge Depleting Bag/Phase #7

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.259
Average System Voltage	386.26
Carbon Monoxide	0
Carbon dioxide	0.038
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0.22
Drive Trace Energy Economy Rating	-0.94
Drive Trace Inertia Work Ratio Rating	0.58
Integrated Amp-hours	60.848
Manufacturer Fuel Economy	999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.000014
Non-methane organic gases	0.000015
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.000059

Charge Depleting Bag/Phase #8

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	10.267	
	Average System Voltage	377.94	
	Carbon Monoxide	0.175769	
	Carbon dioxide	69.26	
	Carbon-Related Exhaust Emissions	69	
	Drive Trace Absolute Speed Change Rating	-1.22	
	Drive Trace Energy Economy Rating	-0.41	
	Drive Trace Inertia Work Ratio Rating	-1.27	
	Integrated Amp-hours	67.903	
	Manufacturer Fuel Economy	128.322	
	Nitrogen Oxide	0.006368	
	Non-methane Hydrocarbon	0.024191	
	Non-methane organic gases	0.024916	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0.027498	

Charge Depleting Bag/Phase #9

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.264
Average System Voltage	381.3
Carbon Monoxide	0.028686
Carbon dioxide	261.241
Carbon-Related Exhaust Emissions	261
Drive Trace Absolute Speed Change Rating	0.8
Drive Trace Energy Economy Rating	-0.5
Drive Trace Inertia Work Ratio Rating	1.11
Integrated Amp-hours	67.566
Manufacturer Fuel Economy	34.192
Nitrogen Oxide	0.000636
Non-methane Hydrocarbon	0.002874
Non-methane organic gases	0.00296
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.004921

Charge Depleting Bag/Phase #10

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
	Test Result/Emission Name	Unrounded Test Result	
	Actual Distance Driven (miles)	10.251	
	Average System Voltage	381.67	
	Carbon Monoxide	0.024084	
	Carbon dioxide	248.085	
	Carbon-Related Exhaust Emissions	248	
	Drive Trace Absolute Speed Change Rating	0.46	
	Drive Trace Energy Economy Rating	-0.86	
	Drive Trace Inertia Work Ratio Rating	0.61	
	Integrated Amp-hours	67.378	
	Manufacturer Fuel Economy	36.008	
	Nitrogen Oxide	0.000216	
	Non-methane Hydrocarbon	0	
	Non-methane organic gases	0	
	Non-methane organic gases plus Nitrogen Oxides	999.999	
	Total Hydrocarbon	0	

Charge Depleting Bag/Phase #11

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.27
Average System Voltage	381.76
Carbon Monoxide	0.045912
Carbon dioxide	247.19
Carbon-Related Exhaust Emissions	247
Drive Trace Absolute Speed Change Rating	0.46
Drive Trace Energy Economy Rating	-0.98
Drive Trace Inertia Work Ratio Rating	0.87
Integrated Amp-hours	67.322
Manufacturer Fuel Economy	36.132
Nitrogen Oxide	0.000653
Non-methane Hydrocarbon	0.001132
Non-methane organic gases	0.001166
Non-methane organic gases plus Nitrogen Oxides	999.999
Total Hydrocarbon	0.00267

Charge Depleting Bag/Phase #12

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C																																
	<table><tr><th>Test Result/Emission Name</th><th>Unrounded Test Result</th></tr><tr><td>Actual Distance Driven (miles)</td><td>10.255</td></tr><tr><td>Average System Voltage</td><td>381.97</td></tr><tr><td>Carbon Monoxide</td><td>0.059591</td></tr><tr><td>Carbon dioxide</td><td>241.662</td></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>242</td></tr><tr><td>Drive Trace Absolute Speed Change Rating</td><td>0.39</td></tr><tr><td>Drive Trace Energy Economy Rating</td><td>-1.11</td></tr><tr><td>Drive Trace Inertia Work Ratio Rating</td><td>0.93</td></tr><tr><td>Integrated Amp-hours</td><td>67.31</td></tr><tr><td>Manufacturer Fuel Economy</td><td>36.956</td></tr><tr><td>Nitrogen Oxide</td><td>0.000722</td></tr><tr><td>Non-methane Hydrocarbon</td><td>0</td></tr><tr><td>Non-methane organic gases</td><td>0</td></tr><tr><td>Non-methane organic gases plus Nitrogen Oxides</td><td>999.999</td></tr><tr><td>Total Hydrocarbon</td><td>0</td></tr></table>			Test Result/Emission Name	Unrounded Test Result	Actual Distance Driven (miles)	10.255	Average System Voltage	381.97	Carbon Monoxide	0.059591	Carbon dioxide	241.662	Carbon-Related Exhaust Emissions	242	Drive Trace Absolute Speed Change Rating	0.39	Drive Trace Energy Economy Rating	-1.11	Drive Trace Inertia Work Ratio Rating	0.93	Integrated Amp-hours	67.31	Manufacturer Fuel Economy	36.956	Nitrogen Oxide	0.000722	Non-methane Hydrocarbon	0	Non-methane organic gases	0	Non-methane organic gases plus Nitrogen Oxides	999.999	Total Hydrocarbon	0
Test Result/Emission Name	Unrounded Test Result																																		
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Manufacturer Fuel Economy	36.956																																		
Nitrogen Oxide	0.000722																																		
Non-methane Hydrocarbon	0																																		
Non-methane organic gases	0																																		
Non-methane organic gases plus Nitrogen Oxides	999.999																																		
Total Hydrocarbon	0																																		
Manufacturer Test Comments	Range Rover 3.0 PHEV charge deplete HWAY. MFR Test Numbers: C6 2023-08-16 06, C6 2023-08-16 07, C6 2023-08-16 08, C6 2023-08-16 09, C6 2023-08-16 10, C6 2023-08-16 11. 275/50R21 Michelin Primacy Tires.																																		

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Emission Data Vehicle Information

Vehicle ID / Configuration	3PNM1021 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	PJLXT03.0PTC	Original Evaporative/Refueling Family	PJLXR0175M1C
Original Test Vehicle Model Year	2023		

Vehicle Model

Represented Test Vehicle Make	LAND ROVER	Represented Test Vehicle Model	New Range Rover PHEV
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Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline
2	Electric Motor	Electricity

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
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	3.0AJPH-23	Rated Horsepower	440
Displacement (liters)	3		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel
Charge Air Cooler Type	Liquid	Drive Mode While Testing	4-Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	6275	Equivalent Test Weight (pounds)	6500
GVWR (lbs)	7605	N/V Ratio	26.8
Axle Ratio	3.73		
Transmission Type	Automatic	# of Transmission Gears	1
Transmission Lockup	Yes	Creeper Gear	No

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	66.274	-0.42077	0.03418	9.554	-0.51339	0.032338	17.4
Cold CO	72.901	-0.46285	0.0376	9.554	-0.51339	0.032338	N/A
US06	66.274	-0.42077	0.03418	9.554	-0.51339	0.032338	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments New Range Rover 3.0L I6 PHEV Evaps EDV.

Test #	PJLX10075832	Test Procedure	38 - CA fuel 3-day evap.
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	09/17/2021	Fuel	Gasoline
Fuel Batch ID	35047	Fuel Calibration Number	6681
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Jaguar Land Rover Limited		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	4309	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	--

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.223	--

Manufacturer Test Comments SET A 4K results 3D + HS (3 day using highest of the three values). 3 day = 0.192, HS = 0.031.

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	0.223	0	0.223	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.223	0	0.223	0.5	Pass

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C						
Test #	PJLX10075835	Test Procedure	38 - CA fuel 3-day evap.						
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	10/15/2021	Fuel	Gasoline						
Fuel Batch ID	35047	Fuel Calibration Number	6681						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Jaguar Land Rover Limited								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	5832	Odometer Units	M						
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	--						
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>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.19</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.19	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.19	--							
Manufacturer Test Comments									
SET B 4K results 3D + HS (3d using highest of the three values). 3 Day = 0.158, Hot Soak = 0.032.									
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	0.19	0	0.19	0.5	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.19	0	0.19	0.5	Pass	

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C						
Test #	PJLX10075839	Test Procedure	37 - California Fuel Running Loss						
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	09/17/2021	Fuel	Gasoline						
Fuel Batch ID	35047	Fuel Calibration Number	6681						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Jaguar Land Rover Limited								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4309	Odometer Units	M						
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	--						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.00053</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00053	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00053	--							
Manufacturer Test Comments									
Running loss test for 4k SET A.									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	120,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.001	0	0	0.01	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.001	0	0	0.01	Pass	

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C					
Test #	PJLX10075874	Test Procedure	24 - Federal fuel refueling test (ORVR)					
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline					
Test Date	10/08/2021	Fuel	Gasoline					
Fuel Batch ID	35047	Fuel Calibration Number	6681					
Vehicle Class	N/A	DF Type	Mfr. Determined					
Verify Test Lab ID	Jaguar Land Rover Limited							
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)							
Test Start Odometer Reading	5491	Odometer Units	M					
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--					
State of Charge Delta	Yes							
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes					
Test Results								
Test Result Name		Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)					
HC (Hydrocarbon for Running Loss and ORVR)		0.03642	--					
Manufacturer Test Comments ORVR TEST FOR 4K SET B.								
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Evap	HC	0.036	0	0.04	0.2	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC	0.036	0	0.04	0.2	Pass

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C						
Test #	PJLX10075875	Test Procedure	37 - California Fuel Running Loss						
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	10/14/2021	Fuel	Gasoline						
Fuel Batch ID	35047	Fuel Calibration Number	6681						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Jaguar Land Rover Limited								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	5832	Odometer Units	M						
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	--						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.000588</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.000588	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.000588	--							
Manufacturer Test Comments									
Running loss test for 4k SET B.									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	120,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.001	0	0	0.01	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.001	0	0	0.01	Pass	

Certification Summary Information Report

Test Group	VJLXT03.OPTC	Evaporative/Refueling Family	VJLXR0175M1C						
Test #	PJLX10076933	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	PJLX10075656	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	09/21/2021	Fuel	Gasoline						
Fuel Batch ID	35047	Fuel Calibration Number	6681						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Jaguar Land Rover Limited								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4727	Odometer Units	M						
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--						
State of Charge Delta	Yes								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC (Hydrocarbon for Running Loss and ORVR)</td> <td>0.005307</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC (Hydrocarbon for Running Loss and ORVR)	0.005307	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC (Hydrocarbon for Running Loss and ORVR)	0.005307	--							
Manufacturer Test Comments									
ORVR TEST FOR 4K SET A.									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	120,000 miles	Federal Tier 3 Evap	HC	0.005	0	0	0.2	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC	0.005	0	0	0.2	Pass	

Certification Summary Information Report

Test Group	VJLXT03.0PTC	Evaporative/Refueling Family	VJLXR0175M1C
Fuel Properties			
Fuel Batch ID	40724	Fuel Calibration Number	6681
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	06/02/2021
Fuel Batch Calibration Effective Date	06/02/2021	Fuel Batch Calibration Ineffective Date	06/02/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.74
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17960
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.835	Weight Fraction CO2	--
Fuel Batch ID	44900	Fuel Calibration Number	9289
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	09/07/2021
Fuel Batch Calibration Effective Date	09/07/2021	Fuel Batch Calibration Ineffective Date	09/07/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.737
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18470
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.872	Weight Fraction CO2	--
Fuel Batch ID	35047	Fuel Calibration Number	6681
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	09/25/2020
Fuel Batch Calibration Effective Date	09/25/2020	Fuel Batch Calibration Ineffective Date	09/25/2024
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.738
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18040
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	--

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family			VJLXR0175M1C	
Consolidated List of Standards									
Exhaust Standards									
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.43	1.0
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	METHANE	--	--	--	--	--	--	0.0029	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.010
150,000 miles	NMOG	--	--	1.04	--	--	--	0.0024	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			SC03	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	1.0
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0001	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.020
150,000 miles	NOX	--	--	--	--	--	--	0.0018	99.999

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family			VJLXR0175M1C	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			US06	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	9.6
150,000 miles	NMOG	--	--	1.03	--	--	--	0	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0044	99.999
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			SC03	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	3.2
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0001	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.020
150,000 miles	NOX	--	--	--	--	--	--	0.0018	999.999
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.43	1.0
150,000 miles	METHANE	--	--	--	--	--	--	0.0029	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.010
150,000 miles	NMOG	--	--	1.04	--	--	--	0.0024	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	99.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Certification Summary Information Report

Test Group	VJLXT03.0PTC				Evaporative/Refueling Family			VJLXR0175M1C	
Cert Region	Federal				Cert/In-Use Code			Both	
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)				Standard Level			Federal Tier 3 Bin 30	
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
120,000 miles	CREE	--	--	--	--	--	--	0	999.999
120,000 miles	METHANE	--	--	--	--	--	--	0.0029	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0007	0.010
150,000 miles	CO	--	--	--	--	--	--	0.43	1.0
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0024	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	California + CAA Section 177 states				Cert/In-Use Code			Both	
Vehicle Class	LDT2 (LVW 3751-5750, GVW 0-6000)				Standard Level			California LEV-III SULEV30	
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	--	--	--	--	--	--	0.43	1.0
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0024	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	99.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	Federal				Cert/In-Use Code			Both	
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)				Standard Level			Federal Tier 3 Bin 30	
Fuel	Electricity				Test Procedure			Charge Depleting Highway	
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	--	--	--	--	--	--	--	999.99

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family			VJLXR0175M1C	
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
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
120,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0024	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0024	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0	99.999
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			US06	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	9.6
150,000 miles	NMOG	--	--	1.03	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0044	999.999

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family			VJLXR0175M1C	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Electricity			Test Procedure			Charge Depleting UDDS	
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	--	--	--	--	--	--	--	999.99
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III SULEV30	
Fuel		Electricity			Test Procedure			Charge Depleting Highway	
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	--	--	--	--	--	--	--	999.99
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.013	12.5
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT2 (LVW 3751-5750, GVW 0-6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			CA fuel 50 Deg(F) exhaust test	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	NMOG	--	--	1.1	--	--	--	0.0024	999.999
50,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.060
50,000 miles	NOX	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group		VJLXT03.0PTC			Evaporative/Refueling Family			VJLXR0175M1C	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.013	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0017	0.3

Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Electricity			Test Procedure			Charge Depleting UDDS	
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	--	--	--	--	--	--	--	999.99

Evaporative/Refueling Standards

Evaporative/Refueling Family		VJLXR0175M1C		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	120.000 miles	HC	--		0.20	0	

Evaporative/Refueling Family		VJLXR0175M1C		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		CA fuel 3-day evap.					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0		

Certification Summary Information Report

Test Group		VJLXT03.0PTC		Evaporative/Refueling Family		VJLXR0175M1C	
Evaporative/Refueling Family		VJLXR0175M1C		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	--	0.500	0		
Evaporative/Refueling Family		VJLXR0175M1C		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC	--	0.20	0		
Evaporative/Refueling Family		VJLXR0175M1C		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		California Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.01	0		
Evaporative/Refueling Family		VJLXR0175M1C		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	120,000 miles	HC-TOTAL-EQUIV	--	0.01	0		

Certification Summary Information Report

Test Group		VJLXT03.0PTC	Evaporative/Refueling Family		VJLXR0175M1C
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		VJLXT03.0PTC	Evaporative/Refueling Family		VJLXR0175M1C
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		VJLXT03.0PTC	Evaporative/Refueling Family		VJLXR0175M1C
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		VJLXT03.0PTC	Evaporative/Refueling Family		VJLXR0175M1C
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	