

**Certification Summary Information Report**

|                                   |                       |                                     |                        |
|-----------------------------------|-----------------------|-------------------------------------|------------------------|
| <b>Manufacturer</b>               | Hyundai Motor Company | <b>Manufacturer Code</b>            | HYX                    |
| <b>Test Group</b>                 | VHYXT01.6M13          | <b>Evaporative/Refueling Family</b> | VHYXR0137M1G           |
| <b>Certificate Number</b>         | VHYXT01.6M13-027      | <b>CARB Executive Order #</b>       | --                     |
| <b>Certificate Issue Date</b>     | 05/14/2026            | <b>Certificate Revision Date</b>    | --                     |
| <b>Certificate Effective Date</b> | 05/14/2026            | <b>Conditional Certificate</b>      | No                     |
| <b>CSI Revision #</b>             | --                    | <b>CSI Submission/Revision Date</b> | 03/31/2026 09:54:48 PM |
| <b>Model Year</b>                 | 2027                  |                                     |                        |

## Certification Summary Information Report

|                   |              |                                     |              |
|-------------------|--------------|-------------------------------------|--------------|
| <b>Test Group</b> | VHYXT01.6M13 | <b>Evaporative/Refueling Family</b> | VHYXR0137M1G |
|-------------------|--------------|-------------------------------------|--------------|

  
**Test Group Information**

|                          |                       |                                        |    |
|--------------------------|-----------------------|----------------------------------------|----|
| <b>CSI Type</b>          | Update for Correction | <b>Running Change Reference Number</b> | -- |
| <b>GHG Exempt Status</b> | Not Exempt            |                                        |    |

  
**Drive Sources and Fuel(s)**

**Drive Source #1:** Combustion Engine

|             |                                      |                                     |
|-------------|--------------------------------------|-------------------------------------|
| <b>Fuel</b> | <b>Basic Fuel Metering System</b>    | <b>Lean Burn Strategy Indicator</b> |
| Gasoline    | Spark Ignition Direct fuel injection | No                                  |

  

**Drive Source #2:** Electric Motor

|             |                                   |                                     |
|-------------|-----------------------------------|-------------------------------------|
| <b>Fuel</b> | <b>Basic Fuel Metering System</b> | <b>Lean Burn Strategy Indicator</b> |
| Electricity | --                                | --                                  |

  

|                                                     |                                                                                                                                                                                                          |                                                            |              |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------|
| <b>Hybrid Indicator</b>                             | Yes                                                                                                                                                                                                      |                                                            |              |
| <b>Multiple Fuel Storage</b>                        | --                                                                                                                                                                                                       | <b>Rechargeable Energy Storage System Indicator</b>        | Yes          |
| <b>Multiple Fuel Combustion</b>                     | --                                                                                                                                                                                                       | <b>Off-board Charge Capable Indicator</b>                  | No           |
| <b>Fuel Cell Indicator</b>                          | No                                                                                                                                                                                                       | <b>EPA Vehicle Class</b>                                   | LDT2         |
| <b>Federal Clean Fuel Vehicle</b>                   | No                                                                                                                                                                                                       | <b>Federal Clean Fuel Vehicle Standard</b>                 | --           |
| <b>Federal Clean Fuel Vehicle ILEV</b>              | No                                                                                                                                                                                                       | <b>California Partial Zero Emissions Vehicle Indicator</b> | No           |
| <b>Durability Group Name</b>                        | VHYXHHGNNM13                                                                                                                                                                                             | <b>Durability Group Equivalency Factor</b>                 | 1.0          |
| <b>Reduced Fee Test Group</b>                       | No                                                                                                                                                                                                       | <b>Certification Region Code(s)</b>                        | FA, CA       |
| <b>Complies with HD GHG 2b/3 regulations?</b>       | No                                                                                                                                                                                                       |                                                            |              |
| <b>Introduction into Commerce Date</b>              | 07/01/2026                                                                                                                                                                                               | <b>CAP2000 Conditional Certificate?</b>                    | No           |
| <b>Independent Commercial Importer?</b>             | No                                                                                                                                                                                                       | <b>Alternative Fuel Converter Certificate?</b>             | No           |
| <b>SFTP Federal Composite Compliance Identifier</b> | Tier 3                                                                                                                                                                                                   | <b>SFTP Tier 2 Composite CO Option</b>                     | No           |
| <b>SFTP LEV-III Composite Compliance Indicator</b>  | No                                                                                                                                                                                                       |                                                            |              |
| <b>OBD Compliance Type</b>                          | CARB                                                                                                                                                                                                     | <b>OBD Demonstration Vehicle Test Group</b>                | VKMXJ01.6P13 |
| <b>Test Group OBD Compliance Level</b>              | Full - no deficiencies                                                                                                                                                                                   | <b>Number of Test Group OBD Deficiencies</b>               | 0            |
| <b>OBD Deficiencies Comments</b>                    | --                                                                                                                                                                                                       |                                                            |              |
| <b>Mfr Test Group Comments</b>                      | The fuel for Litmus test is E0. Litmus result(Value/Threshold) City(34.2/32.6) HWY(33.3/29.7). Test No: RHYX10082583(FTP),RHYX10082577(US06),RHYX10082578(SC03),RHYX10082579(Cold CO),RHYX10082576(HWFE) |                                                            |              |
| <b>Mfr Exhaust / Evap Standards Comments</b>        | --                                                                                                                                                                                                       |                                                            |              |

## Certification Summary Information Report

|                                                                             |                                                  |                                                           |                                     |                      |                                                                  |                     |                       |
|-----------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------|-------------------------------------|----------------------|------------------------------------------------------------------|---------------------|-----------------------|
| <b>Test Group</b>                                                           | VHYXT01.6M13                                     | <b>Evaporative/Refueling Family</b>                       | VHYXR0137M1G                        |                      |                                                                  |                     |                       |
| <b>Evaporative/Refueling Family Information</b>                             |                                                  |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Evaporative Summary Information Type</b>                                 | New                                              | <b>Submission/Correction Date</b>                         | 03/16/2026 02:19:21 AM              |                      |                                                                  |                     |                       |
| <b>Integrated ORVR?</b>                                                     | Yes                                              | <b>Fuel(s)</b>                                            | Gasoline                            |                      |                                                                  |                     |                       |
| <b>Multiple Fuel Storage</b>                                                | --                                               |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Bladder Fuel Tank?</b>                                                   | No                                               |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Fuel Tank Material</b>                                                   | Plastic                                          | <b>Fuel Tank Material Description</b>                     | HDPE                                |                      |                                                                  |                     |                       |
| <b>Fill Pipe Seal Type</b>                                                  | Liquid seal                                      |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Air Intake System Vapor Storage Device?</b>                              | Yes                                              | <b>Air Intake System Vapor Storage Device Description</b> | HC-TRAP                             |                      |                                                                  |                     |                       |
| <b>Fuel System Vapor Storage Canister?</b>                                  | Yes                                              | <b>Other Vapor Storage</b>                                | --                                  |                      |                                                                  |                     |                       |
| <b>Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)</b> | 137                                              | <b>Number of Primary Canisters</b>                        | 1                                   |                      |                                                                  |                     |                       |
| <b>Number of Bleed Canisters</b>                                            | 0                                                | <b>Bleed Canister Total Working Capacity (grams)</b>      | --                                  |                      |                                                                  |                     |                       |
| <b>Mfr Evaporative/Refueling Family Comments</b>                            | --                                               |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Leak Family Details</b>                                                  |                                                  |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Leak Family Indicator</b>                                                | Yes                                              |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Canister Bleed Test Indicator</b>                                        | Yes                                              | <b>Applicability of Evaporative Canister Bleed Test</b>   | 50 State                            |                      |                                                                  |                     |                       |
| <b>Evaporative Canister Bleed Test Comments</b>                             | --                                               |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>CARB Fuel Only (Rig) Test Indicator</b>                                  | No                                               | <b>Applicability of CARB Fuel Only (Rig) Test</b>         | --                                  |                      |                                                                  |                     |                       |
| <b>CARB Fuel Only (Rig) Test Comments</b>                                   | --                                               |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Leak Family Name</b>                                                     | <b>Applicability of Leak Family Requirements</b> | <b>Leak Family Standard (inches)</b>                      | <b>Leak Family Description</b>      |                      |                                                                  |                     |                       |
| VHYXR0137M1G-MXH                                                            | 50 State                                         | 0.02                                                      | --                                  |                      |                                                                  |                     |                       |
| <b>Models Covered by this Certificate</b>                                   |                                                  |                                                           |                                     |                      |                                                                  |                     |                       |
| <b>Carline Manufacturer</b>                                                 | <b>Division</b>                                  | <b>Carline</b>                                            | <b>Certification Region Code(s)</b> | <b>Drive System</b>  | <b>Trans - Type</b>                                              | <b>- # of Gears</b> | <b>Trans - Lockup</b> |
| Hyundai Motor Company                                                       | 1 - HYUNDAI MOTOR COMPANY                        | 59 - Santa Fe Hybrid FWD                                  | California + CAA Section 177 states | 2-Wheel Drive, Front | Automated Manual-Selectable (e.g. Automated Manual with paddles) | 6                   | No                    |
| Hyundai Motor Company                                                       | 1 - HYUNDAI MOTOR COMPANY                        | 59 - Santa Fe Hybrid FWD                                  | Federal                             | 2-Wheel Drive, Front | Automated Manual-Selectable (e.g. Automated Manual with paddles) | 6                   | No                    |
| Hyundai Motor Company                                                       | 1 - HYUNDAI MOTOR COMPANY                        | 58 - Santa Fe Hybrid AWD                                  | California + CAA Section 177 states | All Wheel Drive      | Automated Manual-Selectable (e.g. Automated Manual with paddles) | 6                   | No                    |
| Hyundai Motor Company                                                       | 1 - HYUNDAI MOTOR COMPANY                        | 58 - Santa Fe Hybrid AWD                                  | Federal                             | All Wheel Drive      | Automated Manual-Selectable (e.g. Automated Manual with paddles) | 6                   | No                    |

## Certification Summary Information Report

|                                                  |                                            |                                                          |                           |                               |
|--------------------------------------------------|--------------------------------------------|----------------------------------------------------------|---------------------------|-------------------------------|
| <b>Test Group</b>                                | VHYXT01.6M13                               | <b>Evaporative/Refueling Family</b>                      | VHYXR0137M1G              |                               |
| <b>Engine Description</b>                        |                                            |                                                          |                           |                               |
| <b>Hybrid Type</b>                               | IC Engine/Electric Motor                   | <b>Hybrid Description</b>                                | --                        |                               |
| <b>Engine Type</b>                               | 4-Stroke Spark Ignition                    | <b>Mfr Engine Description</b>                            | --                        |                               |
| <b>Engine Block Arrangement</b>                  | Inline                                     | <b>Mfr Engine Block Arrangement Description</b>          | --                        |                               |
| <b>Camless Valvetrain Indicator</b>              | No                                         | <b>Oil Viscosity/Classification</b>                      | SAE 0W-20, API SN PLUS    |                               |
| <b>Number of Cylinders/Rotors</b>                | 4                                          | <b>Mechanically Variable Compression Ratio Indicator</b> | N                         |                               |
| <b>After Treatment Device(s) (ATD)</b>           |                                            |                                                          |                           |                               |
| <b>ATD Number</b>                                | <b>ATD Type</b>                            | <b>ATD Precious Metal</b>                                | <b>Substrate Material</b> | <b>Substrate Construction</b> |
| 1                                                | Three-way catalyst                         | Platinum + Palladium + Rhodium                           | Ceramic                   | Monolith                      |
| 2                                                | Three-way catalyst                         | Platinum + Rhodium                                       | Ceramic                   | Monolith                      |
| <b>Mfr After Treatment Device (ATD) Comments</b> |                                            |                                                          |                           |                               |
| --                                               |                                            |                                                          |                           |                               |
| <b>Direct Ozone Reduction (DOR) Device</b>       |                                            |                                                          |                           |                               |
| Not Equipped                                     |                                            |                                                          |                           |                               |
| <b>Mfr Emission Control Device Comments</b>      |                                            |                                                          |                           |                               |
| --                                               |                                            |                                                          |                           |                               |
| <b>Engine Configuration Number 1</b>             |                                            |                                                          |                           |                               |
| <b>Engine Displacement (liters)</b>              | 1.6                                        | <b>Engine Rated Horsepower</b>                           | 178                       |                               |
| <b>Number of Inlet Valves Per Cylinder</b>       | 2                                          | <b>Number of Exhaust Valves Per Cylinder</b>             | 2                         |                               |
| <b>Air Aspiration Method</b>                     | Turbocharged                               | <b>Number of Air Aspiration Devices</b>                  | 1                         |                               |
| <b>Air Aspiration Device Configuration</b>       | Single                                     | <b>Charge Air Cooler Type</b>                            | Air                       |                               |
| <b>Air Aspiration Drive Method(s)</b>            | Mechanical                                 |                                                          |                           |                               |
| <b>Cylinder Deactivation</b>                     | No                                         |                                                          |                           |                               |
| <b>Cylinder Deactivation Description</b>         | --                                         |                                                          |                           |                               |
| <b>Variable Valve Timing</b>                     | Yes                                        |                                                          |                           |                               |
| <b>Variable Valve Timing System Description</b>  | Fixed 3 (Continuous Variable Valve Timing) |                                                          |                           |                               |
| <b>Variable Valve Lift?</b>                      | No                                         |                                                          |                           |                               |
| <b>Variable Valve Lift System Description</b>    | --                                         |                                                          |                           |                               |
| <b>Number of Knock Sensors</b>                   | 1                                          | <b>Number of Air/Fuel Sensors</b>                        | 2                         |                               |
| <b>Air/Fuel Sensor # 1 Type</b>                  | Other                                      | <b>Air/Fuel Sensor # 1 Description</b>                   | WR-HO2S                   |                               |
| <b>Air/Fuel Sensor # 2 Type</b>                  | Heated oxygen                              | <b>Air/Fuel Sensor # 2 Description</b>                   | --                        |                               |
| <b>Mfr Air/Fuel Sensor Comments</b>              | --                                         |                                                          |                           |                               |
| <b>Exhaust Gas Recirculation</b>                 | Yes                                        | <b>Cooled Exhaust Gas Recirculation</b>                  | Yes                       |                               |
| <b>EGR Type</b>                                  | Electronic/Electric                        | <b>Exhaust Gas Recirculation Description if 'Other'</b>  | --                        |                               |
| <b>Closed Loop Air Injection System</b>          | No                                         |                                                          |                           |                               |
| <b>Air Injection Type</b>                        | --                                         | <b>Air Injection Type if 'Other'</b>                     | --                        |                               |
| <b>Mfr Engine Configuration Comments</b>         | --                                         |                                                          |                           |                               |

## Certification Summary Information Report

| Test Group                                        |                                                                                                                                    | VHYXT01.6M13                                 |              |              |              | Evaporative/Refueling Family |                           | VHYXR0137M1G             |                              |                       |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------|--------------|--------------|------------------------------|---------------------------|--------------------------|------------------------------|-----------------------|
| 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                                          | RHYX10082549                                                                                                                       | RHYX10082551                                 | RHYX10082554 | RHYX10082552 | RHYX10082550 | 33.6                         | 228.2                     | 34.1                     | 286.1                        | --                    |
| Electricity                                       | --                                                                                                                                 | --                                           | --           | --           | --           | --                           | --                        | --                       | --                           | --                    |
| SFTP LEV-III Official Test Numbers                |                                                                                                                                    |                                              |              |              |              |                              |                           |                          |                              |                       |
| Test Group Fuel                                   | FTP                                                                                                                                | US06                                         | SC03         |              |              |                              |                           |                          |                              |                       |
| Gasoline                                          | RHYX10082549                                                                                                                       | RHYX10082551                                 | RHYX10082554 |              |              |                              |                           |                          |                              |                       |
| Electricity                                       | --                                                                                                                                 | --                                           | --           |              |              |                              |                           |                          |                              |                       |
| Official Charge Depleting Test Numbers            |                                                                                                                                    |                                              |              |              |              |                              |                           |                          |                              |                       |
| Test Group Fuel                                   | UDDS                                                                                                                               | Highway                                      |              |              |              |                              |                           |                          |                              |                       |
| Electricity                                       | --                                                                                                                                 | --                                           |              |              |              |                              |                           |                          |                              |                       |
| 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                    | 270                                                                                                                                | Battery Energy Capacity                      | 5.5          |              |              |                              |                           |                          |                              |                       |
| Battery Specific Energy                           | 40.1                                                                                                                               | Battery Charger Type                         | On-Board     |              |              |                              |                           |                          |                              |                       |
| Number of Capacitors                              | --                                                                                                                                 | Capacitor Rating (In Farads)                 | --           |              |              |                              |                           |                          |                              |                       |
| Mfr Capacitor Comments                            | --                                                                                                                                 |                                              |              |              |              |                              |                           |                          |                              |                       |
| Hydraulic System Description                      | Battery Cells are supplied from SKON and LGES. Battery Specific Energy is 40.1 Whr/kg for SKON Cell and 40.0 Whr/kg for LGEs Cell. |                                              |              |              |              |                              |                           |                          |                              |                       |
| Regenerative Braking Type                         | Electrical Regen Brake                                                                                                             |                                              |              |              |              |                              |                           |                          |                              |                       |
| Regenerative Braking Source                       | Front Wheels                                                                                                                       | Driver Controlled Regenerative Braking       | Yes          |              |              |                              |                           |                          |                              |                       |
| Mfr Regenerative Braking Description              | --                                                                                                                                 |                                              |              |              |              |                              |                           |                          |                              |                       |
| Drive Motor(s)/Generator(s)                       | 1                                                                                                                                  |                                              |              |              |              |                              |                           |                          |                              |                       |
| Motor/Generator Type 1                            | PMSM                                                                                                                               | Rated Motor/Generator Power                  | 48           |              |              |                              |                           |                          |                              |                       |
| Mfr Fuel Cell Description                         | --                                                                                                                                 |                                              |              |              |              |                              |                           |                          |                              |                       |
| Fuel Cell On-Board H2 Storage Capacity (kg)       | --                                                                                                                                 | Usable H2 Fill Capacity (kg)                 | --           |              |              |                              |                           |                          |                              |                       |
| Mfr Hybrid Electric/ Electric Vehicle Comments    | --                                                                                                                                 |                                              |              |              |              |                              |                           |                          |                              |                       |

## Certification Summary Information Report

|                   |              |                                     |              |
|-------------------|--------------|-------------------------------------|--------------|
| <b>Test Group</b> | VHYXT01.6M13 | <b>Evaporative/Refueling Family</b> | VHYXR0137M1G |
|-------------------|--------------|-------------------------------------|--------------|

  
**Emission Data Vehicle Information**

|                                         |                   |                                                  |              |
|-----------------------------------------|-------------------|--------------------------------------------------|--------------|
| <b>Vehicle ID / Configuration</b>       | MX5U4G6HA148A / 0 | <b>Manufacturer Vehicle Configuration Number</b> | 0            |
| <b>Original Test Group Name</b>         | RHYXV01.6M13      | <b>Original Evaporative/Refueling Family</b>     | RHYXR0137M1G |
| <b>Original Test Vehicle Model Year</b> | 2024              |                                                  |              |

**Vehicle Model**

|                                      |         |                                       |                 |
|--------------------------------------|---------|---------------------------------------|-----------------|
| <b>Represented Test Vehicle Make</b> | HYUNDAI | <b>Represented Test Vehicle Model</b> | SANTA FE HYBRID |
|--------------------------------------|---------|---------------------------------------|-----------------|

  
**Leak Family Details**

|                               |     |                         |                  |
|-------------------------------|-----|-------------------------|------------------|
| <b>Leak Family Identifier</b> | MXH | <b>Leak Family Name</b> | RHYXR0137M1G-MXH |
|-------------------------------|-----|-------------------------|------------------|

  
**Drive Sources and Fuel System Details**

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

  

|                                           |                                                                                                 |                                                       |                      |
|-------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------|
| <b>Hybrid Indicator</b>                   | Yes                                                                                             |                                                       |                      |
| <b>Multiple Fuel Storage</b>              | --                                                                                              | <b>Multiple Fuel Combustion</b>                       | --                   |
| <b>Fuel Cell Indicator</b>                | No                                                                                              | <b>Rechargeable Energy Storage System Indicator</b>   | Yes                  |
| <b>Rechargeable Energy Storage System</b> | Battery(s)                                                                                      | <b>Rechargeable Energy Storage System, if 'Other'</b> | --                   |
| <b>Off-board charge Capable Indicator</b> | No                                                                                              |                                                       |                      |
| <b>Odometer Correction -- Initial</b>     | 10                                                                                              | <b>Odometer Correction Factor</b>                     | 1.0165               |
| <b>Odometer Correction Sign</b>           | - = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor |                                                       |                      |
| <b>Odometer Correction Units</b>          | Miles                                                                                           |                                                       |                      |
| <b>Engine Code</b>                        | G4FT-AC                                                                                         | <b>Rated Horsepower</b>                               | 178                  |
| <b>Displacement (liters)</b>              | 1.6                                                                                             |                                                       |                      |
| <b>Air Aspiration Method</b>              | Turbocharged                                                                                    | <b>Air Aspiration Method, if 'Other'</b>              |                      |
| <b>Number of Air Aspiration Devices</b>   | 1                                                                                               | <b>Air Aspiration Device Configuration</b>            | Single               |
| <b>Charge Air Cooler Type</b>             | Air                                                                                             | <b>Drive Mode While Testing</b>                       | 2-Wheel Drive, Front |
| <b>Shift Indicator Light Usage</b>        | Not equipped                                                                                    | <b>Aged Emission Components</b>                       | 4,000 (mi)           |
| <b>Curb Weight (lbs)</b>                  | 4532                                                                                            | <b>Equivalent Test Weight (pounds)</b>                | 4750                 |
| <b>GVWR (lbs)</b>                         | 5799                                                                                            | <b>N/V Ratio</b>                                      | 32.3                 |
| <b>Axle Ratio</b>                         | 3.51                                                                                            |                                                       |                      |
| <b>Transmission Type</b>                  | Automated Manual- Selectable (e.g. Automated Manual with paddles)                               | <b># of Transmission Gears</b>                        | 6                    |
| <b>Transmission Lockup</b>                | No                                                                                              | <b>Creep Gear</b>                                     | No                   |

Certification Summary Information Report

|                                    |         |                                                                                                            |                |                  |                              |                |                                                                                  |  |
|------------------------------------|---------|------------------------------------------------------------------------------------------------------------|----------------|------------------|------------------------------|----------------|----------------------------------------------------------------------------------|--|
| Test Group                         |         | VHYXT01.6M13                                                                                               |                |                  | Evaporative/Refueling Family |                | VHYXR0137M1G                                                                     |  |
| Dynamometer Coefficients:          |         |                                                                                                            |                |                  |                              |                |                                                                                  |  |
| Target Coefficients                |         |                                                                                                            |                | Set Coefficients |                              |                | EPA Calculated Total Road Load Horse Power for<br>City/Highway/Evap Coefficients |  |
| Coefficient<br>Category            | A (lbf) | B (lbf/mph)                                                                                                | C (lbf/mph**2) | A (lbf)          | B (lbf/mph)                  | C (lbf/mph**2) |                                                                                  |  |
| City/Highway/Evap                  | 39.616  | 0.19265                                                                                                    | 0.025583       | 15.719           | 0.14134                      | 0.024753       | 15.1                                                                             |  |
| Cold CO                            | 43.578  | 0.21191                                                                                                    | 0.028141       | 14.328           | 0.09642                      | 0.027517       | N/A                                                                              |  |
| US06                               | 39.616  | 0.19265                                                                                                    | 0.025583       | 15.719           | 0.14134                      | 0.024753       | N/A                                                                              |  |
| Emission Control Device Comments   |         | --                                                                                                         |                |                  |                              |                |                                                                                  |  |
| Manufacturer Test Vehicle Comments |         | 24MY MX5a HEV AWD 20inch. Rated horse power is corrected to 178 hp. Transmission type is corrected to AMS. |                |                  |                              |                |                                                                                  |  |

## Certification Summary Information Report

| Test Group                                     | VHYXT01.6M13                                        | Evaporative/Refueling Family          | VHYXR0137M1G                                        |
|------------------------------------------------|-----------------------------------------------------|---------------------------------------|-----------------------------------------------------|
| <b>Test #</b>                                  | <b>RHYX10082549</b>                                 | <b>Test Procedure</b>                 | <b>21 - Federal fuel 2-day exhaust (w/can load)</b> |
| <b>Exhaust Test # for this Evap Test</b>       | --                                                  | <b>Test Fuel Type</b>                 | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)  |
| <b>Test Date</b>                               | 08/17/2023                                          | <b>Fuel</b>                           | Gasoline                                            |
| <b>Fuel Batch ID</b>                           | 23T-01                                              | <b>Fuel Calibration Number</b>        | 1                                                   |
| <b>Vehicle Class</b>                           | LDT2 (LVW 3751-5750, GVW 0-6000), LDV/Passenger Car | <b>DF Type</b>                        | Mfr. Determined                                     |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                                |                                       |                                                     |
| <b>E10 Evaporative Test Measurement Method</b> | --                                                  |                                       |                                                     |
| <b>Test Start Odometer Reading</b>             | 4122                                                | <b>Odometer Units</b>                 | M                                                   |
| <b>4WD Test Dyno</b>                           | No                                                  | <b>Diesel Adjustment Factor Usage</b> | --                                                  |
| <b>State of Charge Delta</b>                   | Yes                                                 |                                       |                                                     |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)           | <b>Road Speed Fan Usage</b>           | Yes                                                 |

## Test Results

| Test Result Name                                   | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|----------------------------------------------------|-----------------------|----------------------------------------------------------|
| CO2 BAG 1 (Bag 1 Carbon Dioxide)                   | 267                   | --                                                       |
| FE BAG 1 (Bag 1 Fuel Economy)                      | 31.3                  | 31.3                                                     |
| CO2 BAG 2 (Bag 2 Carbon Dioxide)                   | 176                   | --                                                       |
| FE BAG 2 (Bag 2 Fuel Economy)                      | 47.5                  | 47.5                                                     |
| CO2 BAG 3 (Bag 3 Carbon Dioxide)                   | 286                   | --                                                       |
| FE BAG 3 (Bag 3 Fuel Economy)                      | 29.2                  | 29.2                                                     |
| CO2 BAG 4 (Bag 4 Carbon Dioxide)                   | 132                   | --                                                       |
| FE BAG 4 (Bag 4 Fuel Economy)                      | 63.4                  | 63.4                                                     |
| METHANE (CH4 - Methane)                            | 0.0023                | --                                                       |
| CO (Carbon Monoxide)                               | 0.0728                | --                                                       |
| DT-ASCR (Drive Trace Absolute Speed Change Rating) | 1.44                  | --                                                       |
| DT-EER (Drive Trace Energy Economy Rating)         | 1.33                  | --                                                       |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)    | 2.01                  | --                                                       |
| MFR FE (Manufacturer Fuel Economy)                 | 39.4512               | 39.4512                                                  |
| NOX (Nitrogen Oxide)                               | 0.0021                | --                                                       |
| HC-NM (Non-methane Hydrocarbon)                    | 0.0046                | --                                                       |
| NMOG (Non-methane organic gases)                   | 0.0051                | --                                                       |
| PM (Particulate Matter)                            | 0.0006                | --                                                       |
| HC-TOTAL (Total Hydrocarbon)                       | 0.0069                | --                                                       |

## Certification Summary Information Report

| Test Group                                                                                                              |               | VHYXT01.6M13                       |               |                       | Evaporative/Refueling Family |                                 |                          |          | VHYXR0137M1G |                     |          |           |
|-------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------|---------------|-----------------------|------------------------------|---------------------------------|--------------------------|----------|--------------|---------------------|----------|-----------|
|                                                                                                                         |               | Test Result Name                   |               | Unrounded Test Result |                              | Verify Calculated CREE/OPT-CREE |                          |          |              |                     |          |           |
|                                                                                                                         |               | Carbon-Related Exhaust Emissions   |               | 212                   |                              | 999                             |                          |          |              |                     |          |           |
|                                                                                                                         |               | Test Result Name                   |               | Unrounded Test Result |                              | Verify Calculated CO2           |                          |          |              |                     |          |           |
|                                                                                                                         |               | Carbon dioxide                     |               | 212.0611              |                              | --                              |                          |          |              |                     |          |           |
| Manufacturer Test Comments                                                                                              |               | 24MY MX5a HEV AWD 20inch E10 - FTP |               |                       |                              |                                 |                          |          |              |                     |          |           |
| 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                   | --                           | --                              | --                       | 0.229467 | --           | 999                 | --       | --        |
| Fed                                                                                                                     | 120,000 miles | Federal Tier 3 Bin 30              | METHANE       | 0.0023                | --                           | --                              | --                       | 0.0014   | --           | 0.004               | 0.030    | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | CO            | 0.07                  | --                           | --                              | --                       | 0.22     | --           | 0.3                 | 1.0      | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | CO-COMP       | 0.29                  | --                           | --                              | --                       | 0        | --           | 0.3                 | 4.2      | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | NMOG          | 0.0051                | --                           | 1.1                             | --                       | 0.0036   | --           | 0.009               | 99.999   | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | NMOG+NOX      | 0.0072                | --                           | --                              | --                       | --       | --           | 0.012               | 0.030    | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | NMOG+NOX-COMP | 0.0126                | --                           | --                              | --                       | 0        | --           | 0.013               | 0.030    | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | NOX           | 0.0021                | --                           | --                              | --                       | 0.0016   | --           | 0.004               | 99.999   | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30              | PM            | 0.0006                | --                           | --                              | --                       | 0        | --           | 0.001               | 0.003    | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30          | CO            | 0.07                  | --                           | --                              | --                       | 0.22     | --           | 0.3                 | 1.0      | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30          | NMOG          | 0.0051                | --                           | 1.1                             | --                       | 0.0036   | --           | 0.009               | 99.999   | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30          | NMOG+NOX      | 0.0072                | --                           | --                              | --                       | --       | --           | 0.012               | 0.030    | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30          | NOX           | 0.0021                | --                           | --                              | --                       | 0.0016   | --           | 0.004               | 99.999   | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30          | PM            | 0.0006                | --                           | --                              | --                       | 0        | --           | 0.001               | 0.001    | Pass      |
| NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values. |               |                                    |               |                       |                              |                                 |                          |          |              |                     |          |           |

## Certification Summary Information Report

| <b>Test Group</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VHYXT01.6M13                                        | <b>Evaporative/Refueling Family</b>                      | VHYXR0137M1G                               |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------|--------------------------------------------|------------------|-----------------------|----------------------------------------------------------|----------------------------------|----------|----|-------------------------------|------|------|----------------------------------|-----|----|-------------------------------|------|------|----------------------------------|-----|----|-------------------------------|------|------|----------------------|--------|----|----------------------------------------------------|------|----|--------------------------------------------|------|----|-------------------------------------------------|-------|----|------------------------------------|---------|---------|----------------------|--------|----|---------------------------------|--------|----|------------------------------|--------|----|
| <b>Test #</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>RHYX10082552</b>                                 | <b>Test Procedure</b>                                    | <b>11 - Cold CO</b>                        |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | --                                                  | <b>Test Fuel Type</b>                                    | 28 - Cold CO E10 Regular Gasoline (Tier 3) |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 08/15/2023                                          | <b>Fuel</b>                                              | Gasoline                                   |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 22D-01                                              | <b>Fuel Calibration Number</b>                           | 1                                          |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | LDT2 (LVW 3751-5750, GVW 0-6000), LDV/Passenger Car | <b>DF Type</b>                                           | Mfr. Determined                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 772-1, Jangduck-Dong                                |                                                          |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | --                                                  | <b>Odometer Units</b>                                    | M                                          |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4053                                                | <b>Diesel Adjustment Factor Usage</b>                    | --                                         |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No                                                  |                                                          |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes                                                 |                                                          |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)           | <b>Road Speed Fan Usage</b>                              | Yes                                        |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                     |                                                          |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <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>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td> <td>440</td> <td>--</td> </tr> <tr> <td>FE BAG 1 (Bag 1 Fuel Economy)</td> <td>19.6</td> <td>19.6</td> </tr> <tr> <td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td> <td>319</td> <td>--</td> </tr> <tr> <td>FE BAG 2 (Bag 2 Fuel Economy)</td> <td>27.1</td> <td>27.1</td> </tr> <tr> <td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td> <td>300</td> <td>--</td> </tr> <tr> <td>FE BAG 3 (Bag 3 Fuel Economy)</td> <td>28.8</td> <td>28.8</td> </tr> <tr> <td>CO (Carbon Monoxide)</td> <td>0.2013</td> <td>--</td> </tr> <tr> <td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td> <td>0.33</td> <td>--</td> </tr> <tr> <td>DT-EER (Drive Trace Energy Economy Rating)</td> <td>0.55</td> <td>--</td> </tr> <tr> <td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td> <td>-3.43</td> <td>--</td> </tr> <tr> <td>MFR FE (Manufacturer Fuel Economy)</td> <td>25.5039</td> <td>25.5039</td> </tr> <tr> <td>NOX (Nitrogen Oxide)</td> <td>0.0061</td> <td>--</td> </tr> <tr> <td>HC-NM (Non-methane Hydrocarbon)</td> <td>0.0279</td> <td>--</td> </tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.0331</td> <td>--</td> </tr> </tbody> </table> |                                                     |                                                          |                                            | Test Result Name | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) | CO2 BAG 1 (Bag 1 Carbon Dioxide) | 440      | -- | FE BAG 1 (Bag 1 Fuel Economy) | 19.6 | 19.6 | CO2 BAG 2 (Bag 2 Carbon Dioxide) | 319 | -- | FE BAG 2 (Bag 2 Fuel Economy) | 27.1 | 27.1 | CO2 BAG 3 (Bag 3 Carbon Dioxide) | 300 | -- | FE BAG 3 (Bag 3 Fuel Economy) | 28.8 | 28.8 | CO (Carbon Monoxide) | 0.2013 | -- | DT-ASCR (Drive Trace Absolute Speed Change Rating) | 0.33 | -- | DT-EER (Drive Trace Energy Economy Rating) | 0.55 | -- | DT-IWRR (Drive Trace Inertia Work Ratio Rating) | -3.43 | -- | MFR FE (Manufacturer Fuel Economy) | 25.5039 | 25.5039 | NOX (Nitrogen Oxide) | 0.0061 | -- | HC-NM (Non-methane Hydrocarbon) | 0.0279 | -- | HC-TOTAL (Total Hydrocarbon) | 0.0331 | -- |
| Test Result Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unrounded Test Result                               | Verify Calculated FE Equivalent Value (miles per gallon) |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| CO2 BAG 1 (Bag 1 Carbon Dioxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 440                                                 | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| FE BAG 1 (Bag 1 Fuel Economy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 19.6                                                | 19.6                                                     |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| CO2 BAG 2 (Bag 2 Carbon Dioxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 319                                                 | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| FE BAG 2 (Bag 2 Fuel Economy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 27.1                                                | 27.1                                                     |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| CO2 BAG 3 (Bag 3 Carbon Dioxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 300                                                 | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| FE BAG 3 (Bag 3 Fuel Economy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 28.8                                                | 28.8                                                     |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| CO (Carbon Monoxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.2013                                              | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| DT-ASCR (Drive Trace Absolute Speed Change Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.33                                                | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| DT-EER (Drive Trace Energy Economy Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.55                                                | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -3.43                                               | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| MFR FE (Manufacturer Fuel Economy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 25.5039                                             | 25.5039                                                  |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| NOX (Nitrogen Oxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.0061                                              | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| HC-NM (Non-methane Hydrocarbon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.0279                                              | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| HC-TOTAL (Total Hydrocarbon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0331                                              | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated CO2</th> </tr> </thead> <tbody> <tr> <td>Carbon dioxide</td> <td>338.7149</td> <td>--</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |                                                          |                                            | Test Result Name | Unrounded Test Result | Verify Calculated CO2                                    | Carbon dioxide                   | 338.7149 | -- |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| Test Result Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unrounded Test Result                               | Verify Calculated CO2                                    |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| Carbon dioxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 338.7149                                            | --                                                       |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 24MY MX5a HEV AWD 20inch E10 - 20F                  |                                                          |                                            |                  |                       |                                                          |                                  |          |    |                               |      |      |                                  |     |    |                               |      |      |                                  |     |    |                               |      |      |                      |        |    |                                                    |      |    |                                            |      |    |                                                 |       |    |                                    |         |         |                      |        |    |                                 |        |    |                              |        |    |

Certification Summary Information Report

| Test Group           |               | VHYXT01.6M13              |               |                |     | Evaporative/Refueling Family |                          |        |         | VHYXR0137M1G        |          |           |
|----------------------|---------------|---------------------------|---------------|----------------|-----|------------------------------|--------------------------|--------|---------|---------------------|----------|-----------|
| 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            | 0.2            | --  | --                           | --                       | 0.07   | --      | 0.3                 | 12.5     | Pass      |
| Fed                  | 120,000 miles | Federal Tier 3 Bin 30     | HC-NM         | 0.03           | --  | --                           | --                       | 0.0025 | --      | 0                   | 0.3      | Pass      |
| CA                   | 50,000 miles  | California LEV-IV SULEV30 | CO            | 0.2            | --  | --                           | --                       | 0.07   | --      | 0.3                 | 10.0     | Pass      |

## Certification Summary Information Report

| Test Group                                     | VHYXT01.6M13                              | Evaporative/Refueling Family          | VHYXR0137M1G                                       |
|------------------------------------------------|-------------------------------------------|---------------------------------------|----------------------------------------------------|
| <b>Test #</b>                                  | <b>RHYX10082553</b>                       | <b>Test Procedure</b>                 | <b>52 - Fed. fuel 50 F exh.</b>                    |
| <b>Exhaust Test # for this Evap Test</b>       | --                                        | <b>Test Fuel Type</b>                 | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |
| <b>Test Date</b>                               | 09/12/2023                                | <b>Fuel</b>                           | Gasoline                                           |
| <b>Fuel Batch ID</b>                           | 23T-01                                    | <b>Fuel Calibration Number</b>        | 1                                                  |
| <b>Vehicle Class</b>                           | LDV/Passenger Car                         | <b>DF Type</b>                        | Mfr. Determined                                    |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                      |                                       |                                                    |
| <b>E10 Evaporative Test Measurement Method</b> | --                                        |                                       |                                                    |
| <b>Test Start Odometer Reading</b>             | 4687                                      | <b>Odometer Units</b>                 | M                                                  |
| <b>4WD Test Dyno</b>                           | No                                        | <b>Diesel Adjustment Factor Usage</b> | --                                                 |
| <b>State of Charge Delta</b>                   | Yes                                       |                                       |                                                    |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec) | <b>Road Speed Fan Usage</b>           | Yes                                                |

## Test Results

| Test Result Name                                   | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|----------------------------------------------------|-----------------------|----------------------------------------------------------|
| CO (Carbon Monoxide)                               | 0.1029                | --                                                       |
| DT-ASCR (Drive Trace Absolute Speed Change Rating) | 2.35                  | --                                                       |
| DT-EER (Drive Trace Energy Economy Rating)         | 1.9                   | --                                                       |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)    | 3.66                  | --                                                       |
| MFR FE (Manufacturer Fuel Economy)                 | 36.0429               | 36.0429                                                  |
| NOX (Nitrogen Oxide)                               | 0.0024                | --                                                       |
| HC-NM (Non-methane Hydrocarbon)                    | 0.0078                | --                                                       |
| NMOG (Non-methane organic gases)                   | 0.0086                | --                                                       |
| HC-TOTAL (Total Hydrocarbon)                       | 0.0114                | --                                                       |

| Test Result Name | Unrounded Test Result | Verify Calculated CO2 |
|------------------|-----------------------|-----------------------|
| Carbon dioxide   | 232.3831              | --                    |

## Manufacturer Test Comments

24MY MX5a HEV AWD 20inch E10 - 50F

Certification Summary Information Report

| Test Group           |             | VHYXT01.6M13              |               |                |     | Evaporative/Refueling Family |                          |        |         | VHYXR0137M1G        |          |           |
|----------------------|-------------|---------------------------|---------------|----------------|-----|------------------------------|--------------------------|--------|---------|---------------------|----------|-----------|
| 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                   | 4,000 miles | California LEV-IV SULEV30 | CO            | 0.1            | --  | --                           | --                       | --     | --      | 0.1                 | 1.0      | Pass      |
| CA                   | 4,000 miles | California LEV-IV SULEV30 | NMOG          | 0.0086         | --  | 1.1                          | --                       | --     | --      | 0.009               | 99.999   | Pass      |
| CA                   | 4,000 miles | California LEV-IV SULEV30 | NMOG+NOX      | 0.011          | --  | --                           | --                       | --     | --      | 0.011               | 0.060    | Pass      |
| CA                   | 4,000 miles | California LEV-IV SULEV30 | NOX           | 0.0024         | --  | --                           | --                       | --     | --      | 0.002               | 99.999   | Pass      |

## Certification Summary Information Report

| Test Group                                     | VHYXT01.6M13                                           | Evaporative/Refueling Family          | VHYXR0137M1G                                        |
|------------------------------------------------|--------------------------------------------------------|---------------------------------------|-----------------------------------------------------|
| <b>Test #</b>                                  | <b>RHYX10082583</b>                                    | <b>Test Procedure</b>                 | <b>21 - Federal fuel 2-day exhaust (w/can load)</b> |
| <b>Exhaust Test # for this Evap Test</b>       | --                                                     | <b>Test Fuel Type</b>                 | 61 - Tier 2 Cert Gasoline                           |
| <b>Test Date</b>                               | 08/27/2023                                             | <b>Fuel</b>                           | Gasoline                                            |
| <b>Fuel Batch ID</b>                           | 22M-01                                                 | <b>Fuel Calibration Number</b>        | 1                                                   |
| <b>Vehicle Class</b>                           | LDT2 (LVW 3751-5750, GVW 0-6000),<br>LDV/Passenger Car | <b>DF Type</b>                        | Mfr. Determined                                     |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                                   |                                       |                                                     |
| <b>E10 Evaporative Test Measurement Method</b> | --                                                     |                                       |                                                     |
| <b>Test Start Odometer Reading</b>             | 4360                                                   | <b>Odometer Units</b>                 | M                                                   |
| <b>4WD Test Dyno</b>                           | No                                                     | <b>Diesel Adjustment Factor Usage</b> | --                                                  |
| <b>State of Charge Delta</b>                   | Yes                                                    |                                       |                                                     |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)              | <b>Road Speed Fan Usage</b>           | Yes                                                 |

## Test Results

| Test Result Name                                   | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|----------------------------------------------------|-----------------------|----------------------------------------------------------|
| CO2 BAG 1 (Bag 1 Carbon Dioxide)                   | 275                   | --                                                       |
| FE BAG 1 (Bag 1 Fuel Economy)                      | 32.4                  | 32.4                                                     |
| CO2 BAG 2 (Bag 2 Carbon Dioxide)                   | 105                   | --                                                       |
| FE BAG 2 (Bag 2 Fuel Economy)                      | 84.9                  | 84.9                                                     |
| CO2 BAG 3 (Bag 3 Carbon Dioxide)                   | 279                   | --                                                       |
| FE BAG 3 (Bag 3 Fuel Economy)                      | 31.9                  | 31.9                                                     |
| CO2 BAG 4 (Bag 4 Carbon Dioxide)                   | 128                   | --                                                       |
| FE BAG 4 (Bag 4 Fuel Economy)                      | 69.7                  | 69.7                                                     |
| METHANE (CH4 - Methane)                            | 0.0029                | --                                                       |
| CO (Carbon Monoxide)                               | 0.0794                | --                                                       |
| DT-ASCR (Drive Trace Absolute Speed Change Rating) | 1.49                  | --                                                       |
| DT-EER (Drive Trace Energy Economy Rating)         | 1.23                  | --                                                       |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)    | 2.12                  | --                                                       |
| MFR FE (Manufacturer Fuel Economy)                 | 45.7003               | 45.7003                                                  |
| NOX (Nitrogen Oxide)                               | 0.0018                | --                                                       |
| N2O (Nitrous Oxide)                                | 0.0003                | --                                                       |
| HC-NM (Non-methane Hydrocarbon)                    | 0.0057                | --                                                       |
| NMOG (Non-methane organic gases)                   | 0.0059                | --                                                       |
| HC-TOTAL (Total Hydrocarbon)                       | 0.0084                | --                                                       |

## Certification Summary Information Report

| Test Group                                                                                                              |               | VHYXT01.6M13                      |               | Evaporative/Refueling Family |     |                                 |                          | VHYXR0137M1G |         |                     |          |           |
|-------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------|---------------|------------------------------|-----|---------------------------------|--------------------------|--------------|---------|---------------------|----------|-----------|
|                                                                                                                         |               | Test Result Name                  |               | Unrounded Test Result        |     | Verify Calculated CREE/OPT-CREE |                          |              |         |                     |          |           |
|                                                                                                                         |               | Carbon-Related Exhaust Emissions  |               | 195                          |     | 195                             |                          |              |         |                     |          |           |
|                                                                                                                         |               | Test Result Name                  |               | Unrounded Test Result        |     | Verify Calculated CO2           |                          |              |         |                     |          |           |
|                                                                                                                         |               | Carbon dioxide                    |               | 194.8639                     |     | --                              |                          |              |         |                     |          |           |
| Manufacturer Test Comments                                                                                              |               | 24MY MX5a HEV AWD 20inch E0 - FTP |               |                              |     |                                 |                          |              |         |                     |          |           |
| 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          | 195                          | --  | --                              | --                       | 0.229467     | --      | 195                 | --       | --        |
| Fed                                                                                                                     | 120,000 miles | Federal Tier 3 Bin 30             | METHANE       | 0.0029                       | --  | --                              | --                       | 0.0014       | --      | 0.004               | 0.030    | Pass      |
| Fed                                                                                                                     | 120,000 miles | Federal Tier 3 Bin 30             | N2O           | 0.0003                       | --  | --                              | --                       | 0.001        | --      | 0.001               | 0.010    | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30             | CO            | 0.08                         | --  | --                              | --                       | 0.22         | --      | 0.3                 | 1.0      | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30             | NMOG          | 0.0059                       | --  | 1.1                             | --                       | 0.0036       | --      | 0.01                | 99.999   | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30             | NMOG+NOX      | 0.0077                       | --  | --                              | --                       | --           | --      | 0.013               | 0.030    | Pass      |
| Fed                                                                                                                     | 150,000 miles | Federal Tier 3 Bin 30             | NOX           | 0.0018                       | --  | --                              | --                       | 0.0016       | --      | 0.003               | 99.999   | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30         | CO            | 0.08                         | --  | --                              | --                       | 0.22         | --      | 0.3                 | 1.0      | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30         | NMOG          | 0.0059                       | --  | 1.1                             | --                       | 0.0036       | --      | 0.01                | 99.999   | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30         | NMOG+NOX      | 0.0077                       | --  | --                              | --                       | --           | --      | 0.013               | 0.030    | Pass      |
| CA                                                                                                                      | 150,000 miles | California LEV-IV SULEV30         | NOX           | 0.0018                       | --  | --                              | --                       | 0.0016       | --      | 0.003               | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | VHYXT01.6M13                                           | Evaporative/Refueling Family                             | VHYXR0137M1G                                       |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------|------------------|-----------------------|----------------------------------------------------------|----------------------------------|----------|-----|----------------------------------------------------|-----|----|--------------------------------------------|------|----|-------------------------------------------------|------|----|------------------------------------|---------|---------|----------------------|-------|----|---------------------------------|---|----|----------------------------------|---|----|------------------------------|--------|----|
| <b>Test #</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>RHYX10082550</b>                                    | <b>Test Procedure</b>                                    | <b>3 - HWFE</b>                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | --                                                     | <b>Test Fuel Type</b>                                    | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 08/17/2023                                             | <b>Fuel</b>                                              | Gasoline                                           |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 23T-01                                                 | <b>Fuel Calibration Number</b>                           | 1                                                  |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | LDT2 (LVW 3751-5750, GVW 0-6000),<br>LDV/Passenger Car | <b>DF Type</b>                                           | Mfr. Determined                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 772-1, Jangduck-Dong                                   |                                                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | --                                                     |                                                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4136                                                   | <b>Odometer Units</b>                                    | M                                                  |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No                                                     | <b>Diesel Adjustment Factor Usage</b>                    | --                                                 |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes                                                    |                                                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)              | <b>Road Speed Fan Usage</b>                              | Yes                                                |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                        |                                                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <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>CO (Carbon Monoxide)</td> <td>0.0299</td> <td>--</td> </tr> <tr> <td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td> <td>2.3</td> <td>--</td> </tr> <tr> <td>DT-EER (Drive Trace Energy Economy Rating)</td> <td>0.38</td> <td>--</td> </tr> <tr> <td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td> <td>3.38</td> <td>--</td> </tr> <tr> <td>MFR FE (Manufacturer Fuel Economy)</td> <td>38.7361</td> <td>38.7361</td> </tr> <tr> <td>NOX (Nitrogen Oxide)</td> <td>0.001</td> <td>--</td> </tr> <tr> <td>HC-NM (Non-methane Hydrocarbon)</td> <td>0</td> <td>--</td> </tr> <tr> <td>NMOG (Non-methane organic gases)</td> <td>0</td> <td>--</td> </tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.0001</td> <td>--</td> </tr> </tbody> </table> |                                                        |                                                          |                                                    | Test Result Name | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) | CO (Carbon Monoxide)             | 0.0299   | --  | DT-ASCR (Drive Trace Absolute Speed Change Rating) | 2.3 | -- | DT-EER (Drive Trace Energy Economy Rating) | 0.38 | -- | DT-IWRR (Drive Trace Inertia Work Ratio Rating) | 3.38 | -- | MFR FE (Manufacturer Fuel Economy) | 38.7361 | 38.7361 | NOX (Nitrogen Oxide) | 0.001 | -- | HC-NM (Non-methane Hydrocarbon) | 0 | -- | NMOG (Non-methane organic gases) | 0 | -- | HC-TOTAL (Total Hydrocarbon) | 0.0001 | -- |
| Test Result Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unrounded Test Result                                  | Verify Calculated FE Equivalent Value (miles per gallon) |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| CO (Carbon Monoxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.0299                                                 | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| DT-ASCR (Drive Trace Absolute Speed Change Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.3                                                    | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| DT-EER (Drive Trace Energy Economy Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.38                                                   | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.38                                                   | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| MFR FE (Manufacturer Fuel Economy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 38.7361                                                | 38.7361                                                  |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| NOX (Nitrogen Oxide)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.001                                                  | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| HC-NM (Non-methane Hydrocarbon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                                                      | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| NMOG (Non-methane organic gases)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0                                                      | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| HC-TOTAL (Total Hydrocarbon)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0001                                                 | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated CREE/OPT-CREE</th> </tr> </thead> <tbody> <tr> <td>Carbon-Related Exhaust Emissions</td> <td>216</td> <td>999</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |                                                          |                                                    | Test Result Name | Unrounded Test Result | Verify Calculated CREE/OPT-CREE                          | Carbon-Related Exhaust Emissions | 216      | 999 |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| Test Result Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unrounded Test Result                                  | Verify Calculated CREE/OPT-CREE                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| Carbon-Related Exhaust Emissions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 216                                                    | 999                                                      |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated CO2</th> </tr> </thead> <tbody> <tr> <td>Carbon dioxide</td> <td>215.8643</td> <td>--</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                          |                                                    | Test Result Name | Unrounded Test Result | Verify Calculated CO2                                    | Carbon dioxide                   | 215.8643 | --  |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| Test Result Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Unrounded Test Result                                  | Verify Calculated CO2                                    |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| Carbon dioxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 215.8643                                               | --                                                       |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 24MY MX5a HEV AWD 20inch E10 - HWY                     |                                                          |                                                    |                  |                       |                                                          |                                  |          |     |                                                    |     |    |                                            |      |    |                                                 |      |    |                                    |         |         |                      |       |    |                                 |   |    |                                  |   |    |                              |        |    |

## Certification Summary Information Report

| Test Group           |               | VHYXT01.6M13              |               |                | Evaporative/Refueling Family |                  |                          |          |         | VHYXR0137M1G        |          |           |
|----------------------|---------------|---------------------------|---------------|----------------|------------------------------|------------------|--------------------------|----------|---------|---------------------|----------|-----------|
| 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            | --                           | --               | --                       | 0.229467 | --      | 999                 | --       | --        |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG          | 0              | --                           | 1.03             | --                       | 0.0036   | --      | 0.004               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG+NOX      | 0.001          | --                           | --               | --                       | --       | --      | 0.006               | 0.030    | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NOX           | 0.001          | --                           | --               | --                       | 0.0016   | --      | 0.003               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG          | 0              | --                           | 1.03             | --                       | 0.0036   | --      | 0.004               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG+NOX      | 0.001          | --                           | --               | --                       | --       | --      | 0.006               | 0.030    | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NOX           | 0.001          | --                           | --               | --                       | 0.0016   | --      | 0.003               | 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                                     | VHYXT01.6M13                                           | Evaporative/Refueling Family          | VHYXR0137M1G              |
|------------------------------------------------|--------------------------------------------------------|---------------------------------------|---------------------------|
| <b>Test #</b>                                  | <b>RHYX10082576</b>                                    | <b>Test Procedure</b>                 | <b>3 - HWFE</b>           |
| <b>Exhaust Test # for this Evap Test</b>       | --                                                     | <b>Test Fuel Type</b>                 | 61 - Tier 2 Cert Gasoline |
| <b>Test Date</b>                               | 08/27/2023                                             | <b>Fuel</b>                           | Gasoline                  |
| <b>Fuel Batch ID</b>                           | 22M-01                                                 | <b>Fuel Calibration Number</b>        | 1                         |
| <b>Vehicle Class</b>                           | LDT2 (LVW 3751-5750, GVW 0-6000),<br>LDV/Passenger Car | <b>DF Type</b>                        | Mfr. Determined           |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                                   |                                       |                           |
| <b>E10 Evaporative Test Measurement Method</b> | --                                                     |                                       |                           |
| <b>Test Start Odometer Reading</b>             | 4375                                                   | <b>Odometer Units</b>                 | M                         |
| <b>4WD Test Dyno</b>                           | No                                                     | <b>Diesel Adjustment Factor Usage</b> | --                        |
| <b>State of Charge Delta</b>                   | Yes                                                    |                                       |                           |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)              | <b>Road Speed Fan Usage</b>           | Yes                       |

## Test Results

| Test Result Name                                   | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|----------------------------------------------------|-----------------------|----------------------------------------------------------|
| CO (Carbon Monoxide)                               | 0.0743                | --                                                       |
| DT-ASCR (Drive Trace Absolute Speed Change Rating) | 4.05                  | --                                                       |
| DT-EER (Drive Trace Energy Economy Rating)         | 0.5                   | --                                                       |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)    | 5.57                  | --                                                       |
| MFR FE (Manufacturer Fuel Economy)                 | 45.0177               | 45.0177                                                  |
| NOX (Nitrogen Oxide)                               | 0.0004                | --                                                       |
| HC-NM (Non-methane Hydrocarbon)                    | 0                     | --                                                       |
| NMOG (Non-methane organic gases)                   | 0                     | --                                                       |
| HC-TOTAL (Total Hydrocarbon)                       | 0.0001                | --                                                       |

| Test Result Name                 | Unrounded Test Result | Verify Calculated CREE/OPT-CREE |
|----------------------------------|-----------------------|---------------------------------|
| Carbon-Related Exhaust Emissions | 198                   | 198                             |

| Test Result Name | Unrounded Test Result | Verify Calculated CO2 |
|------------------|-----------------------|-----------------------|
| Carbon dioxide   | 197.8053              | --                    |

**Manufacturer Test Comments** 24MY MX5a HEV AWD 20inch E0 - HWY

## Certification Summary Information Report

| Test Group           |               | VHYXT01.6M13              |               |                | Evaporative/Refueling Family |                  |                          |          |         | VHYXR0137M1G        |          |           |
|----------------------|---------------|---------------------------|---------------|----------------|------------------------------|------------------|--------------------------|----------|---------|---------------------|----------|-----------|
| 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          | 198            | --                           | --               | --                       | 0.229467 | --      | 198                 | --       | --        |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG          | 0              | --                           | 1.03             | --                       | 0.0036   | --      | 0.004               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG+NOX      | 0.0004         | --                           | --               | --                       | --       | --      | 0.006               | 0.030    | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NOX           | 0.0004         | --                           | --               | --                       | 0.0016   | --      | 0.002               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG          | 0              | --                           | 1.03             | --                       | 0.0036   | --      | 0.004               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG+NOX      | 0.0004         | --                           | --               | --                       | --       | --      | 0.006               | 0.030    | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NOX           | 0.0004         | --                           | --               | --                       | 0.0016   | --      | 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

|                                                    |                                                        |                                                                 |                                                    |
|----------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------|
| <b>Test Group</b>                                  | VHYXT01.6M13                                           | <b>Evaporative/Refueling Family</b>                             | VHYXR0137M1G                                       |
| <b>Test #</b>                                      | <b>RHYX10082551</b>                                    | <b>Test Procedure</b>                                           | <b>90 - US06</b>                                   |
| <b>Exhaust Test # for this Evap Test</b>           | --                                                     | <b>Test Fuel Type</b>                                           | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |
| <b>Test Date</b>                                   | 08/17/2023                                             | <b>Fuel</b>                                                     | Gasoline                                           |
| <b>Fuel Batch ID</b>                               | 23T-01                                                 | <b>Fuel Calibration Number</b>                                  | 1                                                  |
| <b>Vehicle Class</b>                               | LDT2 (LVW 3751-5750, GVW 0-6000),<br>LDV/Passenger Car | <b>DF Type</b>                                                  | Mfr. Determined                                    |
| <b>Verify Test Lab ID</b>                          | 772-1, Jangduck-Dong                                   |                                                                 |                                                    |
| <b>E10 Evaporative Test Measurement Method</b>     | --                                                     | <b>Odometer Units</b>                                           | M                                                  |
| <b>Test Start Odometer Reading</b>                 | 4157                                                   | <b>Diesel Adjustment Factor Usage</b>                           | --                                                 |
| <b>4WD Test Dyno</b>                               | No                                                     |                                                                 |                                                    |
| <b>State of Charge Delta</b>                       | Yes                                                    |                                                                 |                                                    |
| <b>Drive Cycle Speed Tolerance Criteria</b>        | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)              | <b>Road Speed Fan Usage</b>                                     | Yes                                                |
| <b>Test Results</b>                                |                                                        |                                                                 |                                                    |
| <b>Test Result Name</b>                            | <b>Unrounded Test Result</b>                           | <b>Verify Calculated FE Equivalent Value (miles per gallon)</b> |                                                    |
| CO2 BAG 1 (Bag 1 Carbon Dioxide)                   | 443                                                    | --                                                              |                                                    |
| FE BAG 1 (Bag 1 Fuel Economy)                      | 18.9                                                   | 18.9                                                            |                                                    |
| CO2 BAG 2 (Bag 2 Carbon Dioxide)                   | 291                                                    | --                                                              |                                                    |
| FE BAG 2 (Bag 2 Fuel Economy)                      | 28.7                                                   | 28.7                                                            |                                                    |
| CO (Carbon Monoxide)                               | 0.0569                                                 | --                                                              |                                                    |
| DT-ASCR (Drive Trace Absolute Speed Change Rating) | -2.12                                                  | --                                                              |                                                    |
| DT-EER (Drive Trace Energy Economy Rating)         | -0.45                                                  | --                                                              |                                                    |
| DT-IWRR (Drive Trace Inertia Work Ratio Rating)    | -3.43                                                  | --                                                              |                                                    |
| MFR FE (Manufacturer Fuel Economy)                 | 25.8205                                                | 25.8205                                                         |                                                    |
| NOX (Nitrogen Oxide)                               | 0.0053                                                 | --                                                              |                                                    |
| HC-NM (Non-methane Hydrocarbon)                    | 0.0047                                                 | --                                                              |                                                    |
| NMOG (Non-methane organic gases)                   | 0.0048                                                 | --                                                              |                                                    |
| PM (Particulate Matter)                            | 0.0013                                                 | --                                                              |                                                    |
| HC-TOTAL (Total Hydrocarbon)                       | 0.0074                                                 | --                                                              |                                                    |
| <b>Test Result Name</b>                            | <b>Unrounded Test Result</b>                           | <b>Verify Calculated CO2</b>                                    |                                                    |
| Carbon dioxide                                     | 324.4861                                               | --                                                              |                                                    |
| <b>Manufacturer Test Comments</b>                  |                                                        |                                                                 |                                                    |
| 24MY MX5a HEV AWD 20inch E10 - US06                |                                                        |                                                                 |                                                    |

## Certification Summary Information Report

| Test Group           |               | VHYXT01.6M13              |               |                |     | Evaporative/Refueling Family |                          |        |         | VHYXR0137M1G        |          |           |
|----------------------|---------------|---------------------------|---------------|----------------|-----|------------------------------|--------------------------|--------|---------|---------------------|----------|-----------|
| 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            | 0.0569         | --  | --                           | --                       | 0.22   | --      | 0.277               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG          | 0.0048         | --  | 1.03                         | --                       | 0.0036 | --      | 0.008               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG+NOX      | 0.0101         | --  | --                           | --                       | --     | --      | 0.015               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NOX           | 0.0053         | --  | --                           | --                       | 0.0016 | --      | 0.007               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | PM            | 0.0013         | --  | --                           | --                       | 0      | --      | 0.001               | 0.006    | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | CO            | 0.06           | --  | --                           | --                       | 0.22   | --      | 0.3                 | 9.6      | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG          | 0.0048         | --  | 1.03                         | --                       | 0.0036 | --      | 0.008               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG+NOX      | 0.0101         | --  | --                           | --                       | --     | --      | 0.015               | 0.030    | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NOX           | 0.0053         | --  | --                           | --                       | 0.0016 | --      | 0.007               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | PM            | 0.0013         | --  | --                           | --                       | 0      | --      | 0.001               | 0.003    | Pass      |

## Certification Summary Information Report

| Test Group                                     | VHYXT01.6M13                                           | Evaporative/Refueling Family          | VHYXR0137M1G                                       |
|------------------------------------------------|--------------------------------------------------------|---------------------------------------|----------------------------------------------------|
| <b>Test #</b>                                  | <b>RHYX10082554</b>                                    | <b>Test Procedure</b>                 | <b>95 - SC03</b>                                   |
| <b>Exhaust Test # for this Evap Test</b>       | --                                                     | <b>Test Fuel Type</b>                 | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |
| <b>Test Date</b>                               | 08/18/2023                                             | <b>Fuel</b>                           | Gasoline                                           |
| <b>Fuel Batch ID</b>                           | 23T-01                                                 | <b>Fuel Calibration Number</b>        | 1                                                  |
| <b>Vehicle Class</b>                           | LDT2 (LVW 3751-5750, GVW 0-6000),<br>LDV/Passenger Car | <b>DF Type</b>                        | Mfr. Determined                                    |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                                   |                                       |                                                    |
| <b>E10 Evaporative Test Measurement Method</b> | --                                                     |                                       |                                                    |
| <b>Test Start Odometer Reading</b>             | 4173                                                   | <b>Odometer Units</b>                 | M                                                  |
| <b>4WD Test Dyno</b>                           | No                                                     | <b>Diesel Adjustment Factor Usage</b> | --                                                 |
| <b>State of Charge Delta</b>                   | Yes                                                    |                                       |                                                    |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)              | <b>Road Speed Fan Usage</b>           | Yes                                                |

## Test Results

| Test Result Name                                          | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|-----------------------------------------------------------|-----------------------|----------------------------------------------------------|
| <b>CO (Carbon Monoxide)</b>                               | 0.0688                | --                                                       |
| <b>DT-ASCR (Drive Trace Absolute Speed Change Rating)</b> | 1.47                  | --                                                       |
| <b>DT-EER (Drive Trace Energy Economy Rating)</b>         | 1.34                  | --                                                       |
| <b>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</b>    | 1.75                  | --                                                       |
| <b>MFR FE (Manufacturer Fuel Economy)</b>                 | 23.6995               | 23.6995                                                  |
| <b>NOX (Nitrogen Oxide)</b>                               | 0.0043                | --                                                       |
| <b>HC-NM (Non-methane Hydrocarbon)</b>                    | 0.0012                | --                                                       |
| <b>NMOG (Non-methane organic gases)</b>                   | 0.0012                | --                                                       |
| <b>HC-TOTAL (Total Hydrocarbon)</b>                       | 0.004                 | --                                                       |

| Test Result Name      | Unrounded Test Result | Verify Calculated CO2 |
|-----------------------|-----------------------|-----------------------|
| <b>Carbon dioxide</b> | 353.1541              | --                    |

## Manufacturer Test Comments

24MY MX5a HEV AWD 20inch E10 - SC03

## Certification Summary Information Report

| Test Group           |               | VHYXT01.6M13              |               |                |     | Evaporative/Refueling Family |                          |        |         | VHYXR0137M1G        |          |           |
|----------------------|---------------|---------------------------|---------------|----------------|-----|------------------------------|--------------------------|--------|---------|---------------------|----------|-----------|
| 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            | 0.0688         | --  | --                           | --                       | 0.22   | --      | 0.289               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG          | 0.0012         | --  | 1.03                         | --                       | 0.0036 | --      | 0.005               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NMOG+NOX      | 0.0055         | --  | --                           | --                       | --     | --      | 0.011               | 99.999   | Pass      |
| Fed                  | 150,000 miles | Federal Tier 3 Bin 30     | NOX           | 0.0043         | --  | --                           | --                       | 0.0016 | --      | 0.006               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | CO            | 0.07           | --  | --                           | --                       | 0.22   | --      | 0.3                 | 1.0      | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG          | 0.0012         | --  | 1.03                         | --                       | 0.0036 | --      | 0.005               | 99.999   | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NMOG+NOX      | 0.0055         | --  | --                           | --                       | --     | --      | 0.011               | 0.030    | Pass      |
| CA                   | 150,000 miles | California LEV-IV SULEV30 | NOX           | 0.0043         | --  | --                           | --                       | 0.0016 | --      | 0.006               | 99.999   | Pass      |

## Certification Summary Information Report

|                   |              |                                     |              |
|-------------------|--------------|-------------------------------------|--------------|
| <b>Test Group</b> | VHYXT01.6M13 | <b>Evaporative/Refueling Family</b> | VHYXR0137M1G |
|-------------------|--------------|-------------------------------------|--------------|

  
**Emission Data Vehicle Information**

|                                         |                   |                                                  |              |
|-----------------------------------------|-------------------|--------------------------------------------------|--------------|
| <b>Vehicle ID / Configuration</b>       | MQ4U1G6HA581F / 0 | <b>Manufacturer Vehicle Configuration Number</b> | 0            |
| <b>Original Test Group Name</b>         | MKMXV01.6J13      | <b>Original Evaporative/Refueling Family</b>     | MKMXR0137J1G |
| <b>Original Test Vehicle Model Year</b> | 2021              |                                                  |              |

  
**Vehicle Model**

|                                      |     |                                       |                |
|--------------------------------------|-----|---------------------------------------|----------------|
| <b>Represented Test Vehicle Make</b> | KIA | <b>Represented Test Vehicle Model</b> | SORENTO HYBRID |
|--------------------------------------|-----|---------------------------------------|----------------|

  
**Leak Family Details**

|                               |     |                         |                  |
|-------------------------------|-----|-------------------------|------------------|
| <b>Leak Family Identifier</b> | MQH | <b>Leak Family Name</b> | MKMXR0137J1G-MQH |
|-------------------------------|-----|-------------------------|------------------|

  
**Drive Sources and Fuel System Details**

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

  

|                                           |                                                                                                 |                                                       |                      |
|-------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------|
| <b>Hybrid Indicator</b>                   | Yes                                                                                             |                                                       |                      |
| <b>Multiple Fuel Storage</b>              | --                                                                                              | <b>Multiple Fuel Combustion</b>                       | --                   |
| <b>Fuel Cell Indicator</b>                | No                                                                                              | <b>Rechargeable Energy Storage System Indicator</b>   | Yes                  |
| <b>Rechargeable Energy Storage System</b> | Battery(s)                                                                                      | <b>Rechargeable Energy Storage System, if 'Other'</b> | --                   |
| <b>Off-board charge Capable Indicator</b> | No                                                                                              |                                                       |                      |
| <b>Odometer Correction -- Initial</b>     | 0                                                                                               | <b>Odometer Correction Factor</b>                     | 0.9976               |
| <b>Odometer Correction Sign</b>           | - = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor |                                                       |                      |
| <b>Odometer Correction Units</b>          | Miles                                                                                           |                                                       |                      |
| <b>Engine Code</b>                        | G4FT-AC                                                                                         | <b>Rated Horsepower</b>                               | 177                  |
| <b>Displacement (liters)</b>              | 1.6                                                                                             |                                                       |                      |
| <b>Air Aspiration Method</b>              | Turbocharged                                                                                    | <b>Air Aspiration Method, if 'Other'</b>              |                      |
| <b>Number of Air Aspiration Devices</b>   | 1                                                                                               | <b>Air Aspiration Device Configuration</b>            | Single               |
| <b>Charge Air Cooler Type</b>             | Air                                                                                             | <b>Drive Mode While Testing</b>                       | 2-Wheel Drive, Front |
| <b>Shift Indicator Light Usage</b>        | Not equipped                                                                                    | <b>Aged Emission Components</b>                       | 4,000 (mi)           |
| <b>Curb Weight (lbs)</b>                  | 4065                                                                                            | <b>Equivalent Test Weight (pounds)</b>                | 4250                 |
| <b>GVWR (lbs)</b>                         | 5578                                                                                            | <b>N/V Ratio</b>                                      | 32.3                 |
| <b>Axle Ratio</b>                         | 3.51                                                                                            |                                                       |                      |
| <b>Transmission Type</b>                  | Automated Manual- Selectable (e.g. Automated Manual with paddles)                               | <b># of Transmission Gears</b>                        | 6                    |
| <b>Transmission Lockup</b>                | No                                                                                              | <b>Creep Gear</b>                                     | No                   |

## Certification Summary Information Report

|                   |              |                                     |              |
|-------------------|--------------|-------------------------------------|--------------|
| <b>Test Group</b> | VHYXT01.6M13 | <b>Evaporative/Refueling Family</b> | VHYXR0137M1G |
|-------------------|--------------|-------------------------------------|--------------|

  

**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    | 33.96               | 0.01277     | 0.027097       | 12.811           | 0.05451     | 0.025975       | 13.6                                                                          |

  

**Emission Control Device Comments**      --

**Manufacturer Test Vehicle Comments**      SORENTO HYBRID 21MY 17" EVAP-correct TM type(SA to AMS)

  

|                                                |                                            |                                       |                                     |
|------------------------------------------------|--------------------------------------------|---------------------------------------|-------------------------------------|
| <b>Test #</b>                                  | <b>MKMX10064838</b>                        | <b>Test Procedure</b>                 | <b>38 - CA fuel 3-day evap.</b>     |
| <b>Exhaust Test # for this Evap Test</b>       | MKMX10064829                               | <b>Test Fuel Type</b>                 | 46 - CARB LEV3 E10 Regular Gasoline |
| <b>Test Date</b>                               | 04/29/2020                                 | <b>Fuel</b>                           | Gasoline                            |
| <b>Fuel Batch ID</b>                           | 19E-03                                     | <b>Fuel Calibration Number</b>        | 1                                   |
| <b>Vehicle Class</b>                           | N/A                                        | <b>DF Type</b>                        | Mfr. Determined                     |
| <b>Verify Test Lab ID</b>                      | 772-1, Jangduck-Dong                       |                                       |                                     |
| <b>E10 Evaporative Test Measurement Method</b> | Calculated (1.08 x FID Total Hydrocarbons) |                                       |                                     |
| <b>Test Start Odometer Reading</b>             | 2250                                       | <b>Odometer Units</b>                 | M                                   |
| <b>4WD Test Dyno</b>                           | No                                         | <b>Diesel Adjustment Factor Usage</b> | --                                  |
| <b>State of Charge Delta</b>                   | Yes                                        |                                       |                                     |
| <b>Drive Cycle Speed Tolerance Criteria</b>    | Used Part 86 (+/- 2 mph, +/- 1 sec)        | <b>Road Speed Fan Usage</b>           | No                                  |

  

**Test Results**

| Test Result Name                                          | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) |
|-----------------------------------------------------------|-----------------------|----------------------------------------------------------|
| HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only) | 0.2141                | --                                                       |

  

**Manufacturer Test Comments**      3DBL

  

| 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 | 0.2141         | 0      | 0.214               | 0.4      | Pass      |
| CA                   | 150,000 miles | California LEV-IV Zero Evap (Option 2) | HC-TOTAL-EQUIV | 0.2141         | 0      | 0.214               | 0.3      | Pass      |

## Certification Summary Information Report

| <b>Test Group</b>                                                                                                                                                                                                                                                           | VHYXT01.6M13                               | <b>Evaporative/Refueling Family</b>                      | VHYXR0137M1G                           |                       |                       |                                                          |                                                           |                  |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|----------------------------------------|-----------------------|-----------------------|----------------------------------------------------------|-----------------------------------------------------------|------------------|----|
| <b>Test #</b>                                                                                                                                                                                                                                                               | <b>MKMX10064840</b>                        | <b>Test Procedure</b>                                    | <b>27 - California fuel 2-day evap</b> |                       |                       |                                                          |                                                           |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                    | MKMX10064831                               | <b>Test Fuel Type</b>                                    | 46 - CARB LEV3 E10 Regular             |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                            | 04/14/2020                                 | <b>Fuel</b>                                              | Gasoline                               |                       |                       |                                                          |                                                           |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                        | 19E-03                                     | <b>Fuel Calibration Number</b>                           | 1                                      |                       |                       |                                                          |                                                           |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                        | N/A                                        | <b>DF Type</b>                                           | Mfr. Determined                        |                       |                       |                                                          |                                                           |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                   | 772-1, Jangduck-Dong                       |                                                          |                                        |                       |                       |                                                          |                                                           |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                              | Calculated (1.08 x FID Total Hydrocarbons) |                                                          |                                        |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                          | 2185                                       | <b>Odometer Units</b>                                    | M                                      |                       |                       |                                                          |                                                           |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                        | No                                         | <b>Diesel Adjustment Factor Usage</b>                    | --                                     |                       |                       |                                                          |                                                           |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                | Yes                                        |                                                          |                                        |                       |                       |                                                          |                                                           |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                 | Used Part 86 (+/- 2 mph, +/- 1 sec)        | <b>Road Speed Fan Usage</b>                              | No                                     |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                         |                                            |                                                          |                                        |                       |                       |                                                          |                                                           |                  |    |
| <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>0.2418</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) | 0.2418           | -- |
| Test Result Name                                                                                                                                                                                                                                                            | Unrounded Test Result                      | Verify Calculated FE Equivalent Value (miles per gallon) |                                        |                       |                       |                                                          |                                                           |                  |    |
| HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)                                                                                                                                                                                                                   | 0.2418                                     | --                                                       |                                        |                       |                       |                                                          |                                                           |                  |    |
| <b>Manufacturer Test Comments</b> 2DBL                                                                                                                                                                                                                                      |                                            |                                                          |                                        |                       |                       |                                                          |                                                           |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                                 | <b>Useful Life</b>                         | <b>Standard Level</b>                                    | <b>Emission Name</b>                   | <b>Rounded Result</b> | <b>Add DF</b>         | <b>Certification Level</b>                               | <b>Standard</b>                                           | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                                         | 150,000 miles                              | Federal Tier 3 Evap                                      | HC-TOTAL-EQUIV                         | 0.2418                | 0                     | 0.242                                                    | 0.4                                                       | Pass             |    |
| CA                                                                                                                                                                                                                                                                          | 150,000 miles                              | California LEV-IV Zero Evap (Option 2)                   | HC-TOTAL-EQUIV                         | 0.2418                | 0                     | 0.242                                                    | 0.3                                                       | Pass             |    |

## Certification Summary Information Report

|                                                                                                                                                                                                                                                                                                         |                                            |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|------------------------------------------|-------------------------|------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------|------------------|----|
| <b>Test Group</b>                                                                                                                                                                                                                                                                                       | VHYXT01.6M13                               | <b>Evaporative/Refueling Family</b>                             | VHYXR0137M1G                             |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Test #</b>                                                                                                                                                                                                                                                                                           | <b>MKMX10064839</b>                        | <b>Test Procedure</b>                                           | <b>37 - California Fuel Running Loss</b> |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                                                | MKMX10064829                               | <b>Test Fuel Type</b>                                           | 46 - CARB LEV3 E10 Regular Gasoline      |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                                                        | 04/29/2020                                 | <b>Fuel</b>                                                     | Gasoline                                 |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                                                    | 19E-03                                     | <b>Fuel Calibration Number</b>                                  | 1                                        |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                                                    | N/A                                        | <b>DF Type</b>                                                  | Mfr. Determined                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                                               | 772-1, Jangduck-Dong                       |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                                                          | Calculated (1.08 x FID Total Hydrocarbons) |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                                                      | 2250                                       | <b>Odometer Units</b>                                           | M                                        |                         |                              |                                                                 |                                                                  |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                                                    | No                                         | <b>Diesel Adjustment Factor Usage</b>                           | --                                       |                         |                              |                                                                 |                                                                  |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                                            | Yes                                        |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                                             | Used Part 86 (+/- 2 mph, +/- 1 sec)        | <b>Road Speed Fan Usage</b>                                     | No                                       |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                                                     |                                            |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <table border="1"> <tr> <td><b>Test Result Name</b></td> <td><b>Unrounded Test Result</b></td> <td><b>Verify Calculated FE Equivalent Value (miles per gallon)</b></td> </tr> <tr> <td><b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b></td> <td>0.0002</td> <td>--</td> </tr> </table> |                                            |                                                                 |                                          | <b>Test Result Name</b> | <b>Unrounded Test Result</b> | <b>Verify Calculated FE Equivalent Value (miles per gallon)</b> | <b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b> | 0.0002           | -- |
| <b>Test Result Name</b>                                                                                                                                                                                                                                                                                 | <b>Unrounded Test Result</b>               | <b>Verify Calculated FE Equivalent Value (miles per gallon)</b> |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</b>                                                                                                                                                                                                                                        | 0.0002                                     | --                                                              |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                                                       |                                            |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| RL                                                                                                                                                                                                                                                                                                      |                                            |                                                                 |                                          |                         |                              |                                                                 |                                                                  |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                                                             | <b>Useful Life</b>                         | <b>Standard Level</b>                                           | <b>Emission Name</b>                     | <b>Rounded Result</b>   | <b>Add DF</b>                | <b>Certification Level</b>                                      | <b>Standard</b>                                                  | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                                                                     | 150,000 miles                              | Federal Tier 3 Evap                                             | HC-TOTAL-EQUIV                           | 0                       | 0                            | 0                                                               | 0.05                                                             | Pass             |    |
| CA                                                                                                                                                                                                                                                                                                      | 150,000 miles                              | California LEV-IV Zero Evap (Option 2)                          | HC-TOTAL-EQUIV                           | 0                       | 0                            | 0                                                               | 0.01                                                             | Pass             |    |

## Certification Summary Information Report

| <b>Test Group</b>                                                                                                                                                                                                                                                           | VHYXT01.6M13                               | <b>Evaporative/Refueling Family</b>                      | VHYXR0137M1G                                       |                       |                       |                                                          |                                                           |                  |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|----------------------------------------------------|-----------------------|-----------------------|----------------------------------------------------------|-----------------------------------------------------------|------------------|----|
| <b>Test #</b>                                                                                                                                                                                                                                                               | <b>MKMX10064841</b>                        | <b>Test Procedure</b>                                    | <b>24 - Federal fuel refueling test (ORVR)</b>     |                       |                       |                                                          |                                                           |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                    | MKMX10064824                               | <b>Test Fuel Type</b>                                    | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                            | 03/19/2020                                 | <b>Fuel</b>                                              | Gasoline                                           |                       |                       |                                                          |                                                           |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                        | 19T-02                                     | <b>Fuel Calibration Number</b>                           | 1                                                  |                       |                       |                                                          |                                                           |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                        | N/A                                        | <b>DF Type</b>                                           | Mfr. Determined                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                   | 772-1, Jangduck-Dong                       |                                                          |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                              | Calculated (1.08 x FID Total Hydrocarbons) |                                                          |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                          | 2114                                       | <b>Odometer Units</b>                                    | M                                                  |                       |                       |                                                          |                                                           |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                        | No                                         | <b>Diesel Adjustment Factor Usage</b>                    | --                                                 |                       |                       |                                                          |                                                           |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                | --                                         |                                                          |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                 | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)  | <b>Road Speed Fan Usage</b>                              | No                                                 |                       |                       |                                                          |                                                           |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                         |                                            |                                                          |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <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>0.0304</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) | 0.0304           | -- |
| Test Result Name                                                                                                                                                                                                                                                            | Unrounded Test Result                      | Verify Calculated FE Equivalent Value (miles per gallon) |                                                    |                       |                       |                                                          |                                                           |                  |    |
| HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)                                                                                                                                                                                                                   | 0.0304                                     | --                                                       |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>Manufacturer Test Comments</b> ORVR                                                                                                                                                                                                                                      |                                            |                                                          |                                                    |                       |                       |                                                          |                                                           |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                                 | <b>Useful Life</b>                         | <b>Standard Level</b>                                    | <b>Emission Name</b>                               | <b>Rounded Result</b> | <b>Add DF</b>         | <b>Certification Level</b>                               | <b>Standard</b>                                           | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                                         | 150,000 miles                              | Federal Tier 3 Evap                                      | HC-TOTAL-EQUIV                                     | 0.03                  | 0                     | 0.03                                                     | 0.2                                                       | Pass             |    |
| CA                                                                                                                                                                                                                                                                          | 150,000 miles                              | California LEV-IV Zero Evap (Option 2)                   | HC-TOTAL-EQUIV                                     | 0.03                  | 0                     | 0.03                                                     | 0.2                                                       | Pass             |    |

## Certification Summary Information Report

| Test Group                                                                                                                                                                                                                                                                       | VHYXT01.6M13                               | Evaporative/Refueling Family                             | VHYXR0137M1G                         |                       |                       |                                                          |                              |                  |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|--------------------------------------|-----------------------|-----------------------|----------------------------------------------------------|------------------------------|------------------|----|
| <b>Test #</b>                                                                                                                                                                                                                                                                    | <b>MKMX10064842</b>                        | <b>Test Procedure</b>                                    | <b>65 - Evap Canister Bleed Test</b> |                       |                       |                                                          |                              |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                                         | --                                         | <b>Test Fuel Type</b>                                    | 46 - CARB LEV3 E10 Regular           |                       |                       |                                                          |                              |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                                 | 03/24/2020                                 | <b>Fuel</b>                                              | Gasoline                             |                       |                       |                                                          |                              |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                                             | 19E-03                                     | <b>Fuel Calibration Number</b>                           | 1                                    |                       |                       |                                                          |                              |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                                             | N/A                                        | <b>DF Type</b>                                           | Mfr. Determined                      |                       |                       |                                                          |                              |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                                        | 772-1, Jangduck-Dong                       |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                                   | Calculated (1.08 x FID Total Hydrocarbons) |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                               | 2141                                       | <b>Odometer Units</b>                                    | M                                    |                       |                       |                                                          |                              |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                                             | No                                         | <b>Diesel Adjustment Factor Usage</b>                    | --                                   |                       |                       |                                                          |                              |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                                     | --                                         |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                                      | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)  | <b>Road Speed Fan Usage</b>                              | No                                   |                       |                       |                                                          |                              |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                                              |                                            |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| <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 (Total Hydrocarbon)</td> <td>0.0077</td> <td>--</td> </tr> </tbody> </table> |                                            |                                                          |                                      | Test Result Name      | Unrounded Test Result | Verify Calculated FE Equivalent Value (miles per gallon) | HC-TOTAL (Total Hydrocarbon) | 0.0077           | -- |
| Test Result Name                                                                                                                                                                                                                                                                 | Unrounded Test Result                      | Verify Calculated FE Equivalent Value (miles per gallon) |                                      |                       |                       |                                                          |                              |                  |    |
| HC-TOTAL (Total Hydrocarbon)                                                                                                                                                                                                                                                     | 0.0077                                     | --                                                       |                                      |                       |                       |                                                          |                              |                  |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                                |                                            |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| BLEED-CORRECT E10 MEASUREMENT METHOD                                                                                                                                                                                                                                             |                                            |                                                          |                                      |                       |                       |                                                          |                              |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                                      | <b>Useful Life</b>                         | <b>Standard Level</b>                                    | <b>Emission Name</b>                 | <b>Rounded Result</b> | <b>Add DF</b>         | <b>Certification Level</b>                               | <b>Standard</b>              | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                                              | 150,000 miles                              | Federal Tier 3 Evap                                      | HC-TOTAL                             | 0.0077                | 0                     | 0.008                                                    | 0.02                         | Pass             |    |
| CA                                                                                                                                                                                                                                                                               | 150,000 miles                              | California LEV-IV Zero Evap (Option 2)                   | HC-TOTAL                             | 0.0077                | 0                     | 0.008                                                    | 0.02                         | Pass             |    |

## Certification Summary Information Report

|                                                                                                                                                                                                                                                                   |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------------------------------------------|-------------------------|------------------------------|----------------------------------------------|----------------------------------------------------|------------------|----|
| <b>Test Group</b>                                                                                                                                                                                                                                                 | VHYXT01.6M13                              | <b>Evaporative/Refueling Family</b>          | VHYXR0137M1G                                       |                         |                              |                                              |                                                    |                  |    |
| <b>Test #</b>                                                                                                                                                                                                                                                     | <b>MKMX10064832</b>                       | <b>Test Procedure</b>                        | <b>67 - Leak Test - Port Near Canister</b>         |                         |                              |                                              |                                                    |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                          | --                                        | <b>Test Fuel Type</b>                        | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |                         |                              |                                              |                                                    |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                  | 03/13/2020                                | <b>Fuel</b>                                  | Gasoline                                           |                         |                              |                                              |                                                    |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                              | 19T-02                                    | <b>Fuel Calibration Number</b>               | 1                                                  |                         |                              |                                              |                                                    |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                              | N/A                                       | <b>DF Type</b>                               | Mfr. Determined                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                         | 772-1, Jangduck-Dong                      |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                    | --                                        |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                | 2045                                      | <b>Odometer Units</b>                        | M                                                  |                         |                              |                                              |                                                    |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                              | No                                        | <b>Diesel Adjustment Factor Usage</b>        | --                                                 |                         |                              |                                              |                                                    |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                      | --                                        |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                       | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec) | <b>Road Speed Fan Usage</b>                  | No                                                 |                         |                              |                                              |                                                    |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                               |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <table border="1"> <tr> <td><b>Test Result Name</b></td> <td><b>Unrounded Test Result</b></td> <td><b>Verify Calculated FE Equivalent Value</b></td> </tr> <tr> <td><b>LEAK-DIA (Effective Leak Diameter (inches))</b></td> <td>0</td> <td>--</td> </tr> </table> |                                           |                                              |                                                    | <b>Test Result Name</b> | <b>Unrounded Test Result</b> | <b>Verify Calculated FE Equivalent Value</b> | <b>LEAK-DIA (Effective Leak Diameter (inches))</b> | 0                | -- |
| <b>Test Result Name</b>                                                                                                                                                                                                                                           | <b>Unrounded Test Result</b>              | <b>Verify Calculated FE Equivalent Value</b> |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>LEAK-DIA (Effective Leak Diameter (inches))</b>                                                                                                                                                                                                                | 0                                         | --                                           |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                 |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| Leak Test Port Near Canister                                                                                                                                                                                                                                      |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                       | <b>Useful Life</b>                        | <b>Standard Level</b>                        | <b>Emission Name</b>                               | <b>Rounded Result</b>   | <b>Add DF</b>                | <b>Certification Level</b>                   | <b>Standard</b>                                    | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                               | 150,000 miles                             | Federal Tier 3 Evap                          | LEAK-DIA                                           | 0                       | 0                            | 0                                            | 0.02                                               | Pass             |    |
| CA                                                                                                                                                                                                                                                                | 150,000 miles                             | California LEV-IV Zero Evap (Option 2)       | LEAK-DIA                                           | 0                       | 0                            | 0                                            | 0.02                                               | Pass             |    |

## Certification Summary Information Report

|                                                                                                                                                                                                                                                                   |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------------------------------------------|-------------------------|------------------------------|----------------------------------------------|----------------------------------------------------|------------------|----|
| <b>Test Group</b>                                                                                                                                                                                                                                                 | VHYXT01.6M13                              | <b>Evaporative/Refueling Family</b>          | VHYXR0137M1G                                       |                         |                              |                                              |                                                    |                  |    |
| <b>Test #</b>                                                                                                                                                                                                                                                     | <b>MKMX10064837</b>                       | <b>Test Procedure</b>                        | <b>68 - Leak Test - Port Near Fuel Pipe</b>        |                         |                              |                                              |                                                    |                  |    |
| <b>Exhaust Test # for this Evap Test</b>                                                                                                                                                                                                                          | --                                        | <b>Test Fuel Type</b>                        | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) |                         |                              |                                              |                                                    |                  |    |
| <b>Test Date</b>                                                                                                                                                                                                                                                  | 03/13/2020                                | <b>Fuel</b>                                  | Gasoline                                           |                         |                              |                                              |                                                    |                  |    |
| <b>Fuel Batch ID</b>                                                                                                                                                                                                                                              | 19T-02                                    | <b>Fuel Calibration Number</b>               | 1                                                  |                         |                              |                                              |                                                    |                  |    |
| <b>Vehicle Class</b>                                                                                                                                                                                                                                              | N/A                                       | <b>DF Type</b>                               | Mfr. Determined                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Verify Test Lab ID</b>                                                                                                                                                                                                                                         | 772-1, Jangduck-Dong                      |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>E10 Evaporative Test Measurement Method</b>                                                                                                                                                                                                                    | --                                        |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Test Start Odometer Reading</b>                                                                                                                                                                                                                                | 2045                                      | <b>Odometer Units</b>                        | M                                                  |                         |                              |                                              |                                                    |                  |    |
| <b>4WD Test Dyno</b>                                                                                                                                                                                                                                              | No                                        | <b>Diesel Adjustment Factor Usage</b>        | --                                                 |                         |                              |                                              |                                                    |                  |    |
| <b>State of Charge Delta</b>                                                                                                                                                                                                                                      | --                                        |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Drive Cycle Speed Tolerance Criteria</b>                                                                                                                                                                                                                       | Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec) | <b>Road Speed Fan Usage</b>                  | No                                                 |                         |                              |                                              |                                                    |                  |    |
| <b>Test Results</b>                                                                                                                                                                                                                                               |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <table border="1"> <tr> <td><b>Test Result Name</b></td> <td><b>Unrounded Test Result</b></td> <td><b>Verify Calculated FE Equivalent Value</b></td> </tr> <tr> <td><b>LEAK-DIA (Effective Leak Diameter (inches))</b></td> <td>0</td> <td>--</td> </tr> </table> |                                           |                                              |                                                    | <b>Test Result Name</b> | <b>Unrounded Test Result</b> | <b>Verify Calculated FE Equivalent Value</b> | <b>LEAK-DIA (Effective Leak Diameter (inches))</b> | 0                | -- |
| <b>Test Result Name</b>                                                                                                                                                                                                                                           | <b>Unrounded Test Result</b>              | <b>Verify Calculated FE Equivalent Value</b> |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>LEAK-DIA (Effective Leak Diameter (inches))</b>                                                                                                                                                                                                                | 0                                         | --                                           |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Manufacturer Test Comments</b>                                                                                                                                                                                                                                 |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| Leak Test Port Near Fuel Pipe                                                                                                                                                                                                                                     |                                           |                                              |                                                    |                         |                              |                                              |                                                    |                  |    |
| <b>Certification Region</b>                                                                                                                                                                                                                                       | <b>Useful Life</b>                        | <b>Standard Level</b>                        | <b>Emission Name</b>                               | <b>Rounded Result</b>   | <b>Add DF</b>                | <b>Certification Level</b>                   | <b>Standard</b>                                    | <b>Pass/Fail</b> |    |
| Fed                                                                                                                                                                                                                                                               | 150,000 miles                             | Federal Tier 3 Evap                          | LEAK-DIA                                           | 0                       | 0                            | 0                                            | 0.02                                               | Pass             |    |
| CA                                                                                                                                                                                                                                                                | 150,000 miles                             | California LEV-IV Zero Evap (Option 2)       | LEAK-DIA                                           | 0                       | 0                            | 0                                            | 0.02                                               | Pass             |    |

## Certification Summary Information Report

| Test Group                                                                | VHYXT01.6M13                                       | Evaporative/Refueling Family                                              | VHYXR0137M1G |
|---------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------|--------------|
| <b>Fuel Properties</b>                                                    |                                                    |                                                                           |              |
| <b>Fuel Batch ID</b>                                                      | <b>19E-03</b>                                      | <b>Fuel Calibration Number</b>                                            | <b>1</b>     |
| <b>Test Fuel Type</b>                                                     | 46 - CARB LEV3 E10 Regular Gasoline                | <b>Fuel Batch Calibration Date</b>                                        | 08/08/2019   |
| <b>Fuel Batch Calibration Effective Date</b>                              | 10/29/2019                                         | <b>Fuel Batch Calibration Ineffective Date</b>                            | 10/29/2022   |
| <b>Carbon Weight Fraction NMHC</b>                                        | --                                                 | <b>Carbon Weight Fraction HC</b>                                          | --           |
| <b>Exhaust Carbon Weight Fraction</b>                                     | --                                                 | <b>Fuel Methanol Volume Fraction</b>                                      | --           |
| <b>Fuel Density (grams/cubic ft)</b>                                      | --                                                 | <b>Fuel Specific Gravity</b>                                              | 0.75         |
| <b>Fuel Ethanol Volume Percent (%)</b>                                    | 9.6                                                | <b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b> | 17917        |
| <b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>                          | --                                                 | <b>Fuel Carbon Mass Fraction (E10)</b>                                    | --           |
| <b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b> | 0.827                                              | <b>Weight Fraction CO2</b>                                                | --           |
| <b>Fuel Batch ID</b>                                                      | <b>23T-01</b>                                      | <b>Fuel Calibration Number</b>                                            | <b>1</b>     |
| <b>Test Fuel Type</b>                                                     | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) | <b>Fuel Batch Calibration Date</b>                                        | 09/29/2022   |
| <b>Fuel Batch Calibration Effective Date</b>                              | 08/07/2023                                         | <b>Fuel Batch Calibration Ineffective Date</b>                            | 08/07/2026   |
| <b>Carbon Weight Fraction NMHC</b>                                        | --                                                 | <b>Carbon Weight Fraction HC</b>                                          | --           |
| <b>Exhaust Carbon Weight Fraction</b>                                     | --                                                 | <b>Fuel Methanol Volume Fraction</b>                                      | --           |
| <b>Fuel Density (grams/cubic ft)</b>                                      | --                                                 | <b>Fuel Specific Gravity</b>                                              | 0.74         |
| <b>Fuel Ethanol Volume Percent (%)</b>                                    | 9.8                                                | <b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b> | 18779        |
| <b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>                          | --                                                 | <b>Fuel Carbon Mass Fraction (E10)</b>                                    | --           |
| <b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b> | 0.824                                              | <b>Weight Fraction CO2</b>                                                | --           |
| <b>Fuel Batch ID</b>                                                      | <b>22D-01</b>                                      | <b>Fuel Calibration Number</b>                                            | <b>1</b>     |
| <b>Test Fuel Type</b>                                                     | 28 - Cold CO E10 Regular Gasoline (Tier 3)         | <b>Fuel Batch Calibration Date</b>                                        | 07/29/2021   |
| <b>Fuel Batch Calibration Effective Date</b>                              | 05/10/2022                                         | <b>Fuel Batch Calibration Ineffective Date</b>                            | 05/10/2025   |
| <b>Carbon Weight Fraction NMHC</b>                                        | --                                                 | <b>Carbon Weight Fraction HC</b>                                          | --           |
| <b>Exhaust Carbon Weight Fraction</b>                                     | --                                                 | <b>Fuel Methanol Volume Fraction</b>                                      | --           |
| <b>Fuel Density (grams/cubic ft)</b>                                      | --                                                 | <b>Fuel Specific Gravity</b>                                              | 0.742        |
| <b>Fuel Ethanol Volume Percent (%)</b>                                    | 9.9                                                | <b>Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)</b> | 17925        |
| <b>Fuel Net Heat of Combustion (E10) (MJ/kg)</b>                          | --                                                 | <b>Fuel Carbon Mass Fraction (E10)</b>                                    | --           |
| <b>Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)</b> | 0.828                                              | <b>Weight Fraction CO2</b>                                                | --           |
| <b>Fuel Batch ID</b>                                                      | <b>19T-02</b>                                      | <b>Fuel Calibration Number</b>                                            | <b>1</b>     |
| <b>Test Fuel Type</b>                                                     | 48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.) | <b>Fuel Batch Calibration Date</b>                                        | 06/05/2019   |
| <b>Fuel Batch Calibration Effective Date</b>                              | 12/10/2019                                         | <b>Fuel Batch Calibration Ineffective Date</b>                            | 12/10/2022   |
| <b>Carbon Weight Fraction NMHC</b>                                        | --                                                 | <b>Carbon Weight Fraction HC</b>                                          | --           |

## Certification Summary Information Report

| Test Group                                                         |                           | VHYXT01.6M13 | Evaporative/Refueling Family                                       | VHYXR0137M1G |
|--------------------------------------------------------------------|---------------------------|--------------|--------------------------------------------------------------------|--------------|
| Exhaust Carbon Weight Fraction                                     | --                        |              | Fuel Methanol Volume Fraction                                      | --           |
| Fuel Density (grams/cubic ft)                                      | --                        |              | Fuel Specific Gravity                                              | 0.744        |
| Fuel Ethanol Volume Percent (%)                                    | 9.8                       |              | Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb) | 17949        |
| Fuel Net Heat of Combustion (E10) (MJ/kg)                          | --                        |              | Fuel Carbon Mass Fraction (E10)                                    | --           |
| Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0) | 0.826                     |              | Weight Fraction CO2                                                | --           |
| Fuel Batch ID                                                      | 22M-01                    |              | Fuel Calibration Number                                            | 1            |
| Test Fuel Type                                                     | 61 - Tier 2 Cert Gasoline |              | Fuel Batch Calibration Date                                        | 02/14/2022   |
| Fuel Batch Calibration Effective Date                              | 02/14/2022                |              | Fuel Batch Calibration Ineffective Date                            | 02/14/2025   |
| Carbon Weight Fraction NMHC                                        | --                        |              | Carbon Weight Fraction HC                                          | --           |
| Exhaust Carbon Weight Fraction                                     | --                        |              | Fuel Methanol Volume Fraction                                      | --           |
| Fuel Density (grams/cubic ft)                                      | --                        |              | Fuel Specific Gravity                                              | 0.743        |
| Fuel Ethanol Volume Percent (%)                                    | --                        |              | Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb) | 18435        |
| Fuel Net Heat of Combustion (E10) (MJ/kg)                          | --                        |              | Fuel Carbon Mass Fraction (E10)                                    | --           |
| Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0) | 0.867                     |              | Weight Fraction CO2                                                | --           |

## Certification Summary Information Report

|                                |               |                                     |     |             |                                 |                                   |         |                           |        |  |
|--------------------------------|---------------|-------------------------------------|-----|-------------|---------------------------------|-----------------------------------|---------|---------------------------|--------|--|
| Test Group                     |               | VHYXT01.6M13                        |     |             | Evaporative/Refueling Family    |                                   |         | VHYXR0137M1G              |        |  |
| Consolidated List of Standards |               |                                     |     |             |                                 |                                   |         |                           |        |  |
| Exhaust Standards              |               |                                     |     |             |                                 |                                   |         |                           |        |  |
| Cert Region                    |               | Federal                             |     |             | Cert/In-Use Code                |                                   |         | Cert                      |        |  |
| Vehicle Class                  |               | LDT2 (LVW 3751-5750, GVW 0-6000)    |     |             | 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            | --                                  | --  | --          | --                              | --                                | --      | 0.22                      | 99.999 |  |
| 150,000 miles                  | NMOG          | --                                  | --  | 1.03        | --                              | --                                | --      | 0.0036                    | 99.999 |  |
| 150,000 miles                  | NMOG+NOX      | --                                  | --  | --          | --                              | --                                | --      | 0                         | 99.999 |  |
| 150,000 miles                  | NOX           | --                                  | --  | --          | --                              | --                                | --      | 0.0016                    | 99.999 |  |
|                                |               |                                     |     |             |                                 |                                   |         |                           |        |  |
| Cert Region                    |               | Federal                             |     |             | Cert/In-Use Code                |                                   |         | Cert                      |        |  |
| Vehicle Class                  |               | LDT2 (LVW 3751-5750, GVW 0-6000)    |     |             | 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            | --                                  | --  | --          | --                              | --                                | --      | 0.22                      | 99.999 |  |
| 150,000 miles                  | NMOG          | --                                  | --  | 1.03        | --                              | --                                | --      | 0.0036                    | 99.999 |  |
| 150,000 miles                  | NMOG+NOX      | --                                  | --  | --          | --                              | --                                | --      | 0                         | 99.999 |  |
| 150,000 miles                  | NOX           | --                                  | --  | --          | --                              | --                                | --      | 0.0016                    | 99.999 |  |
| 150,000 miles                  | PM            | --                                  | --  | --          | --                              | --                                | --      | 0                         | 0.006  |  |
|                                |               |                                     |     |             |                                 |                                   |         |                           |        |  |
| Cert Region                    |               | California + CAA Section 177 states |     |             | Cert/In-Use Code                |                                   |         | Cert                      |        |  |
| Vehicle Class                  |               | LDV/Passenger Car                   |     |             | Standard Level                  |                                   |         | California LEV-IV 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            | --                                  | --  | --          | --                              | --                                | --      | 0.22                      | 1.0    |  |
| 150,000 miles                  | NMOG          | --                                  | --  | 1.03        | --                              | --                                | --      | 0.0036                    | 99.999 |  |
| 150,000 miles                  | NMOG+NOX      | --                                  | --  | --          | --                              | --                                | --      | 0                         | 0.030  |  |
| 150,000 miles                  | NOX           | --                                  | --  | --          | --                              | --                                | --      | 0.0016                    | 99.999 |  |
|                                |               |                                     |     |             |                                 |                                   |         |                           |        |  |

## Certification Summary Information Report

|                      |                      |                                     |            |                    |                                        |                                          |                |                                         |            |
|----------------------|----------------------|-------------------------------------|------------|--------------------|----------------------------------------|------------------------------------------|----------------|-----------------------------------------|------------|
| <b>Test Group</b>    |                      | VHYXT01.6M13                        |            |                    | Evaporative/Refueling Family           |                                          |                | VHYXR0137M1G                            |            |
| <b>Cert Region</b>   |                      | California + CAA Section 177 states |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                                    |            |
| <b>Vehicle Class</b> |                      | LDV/Passenger Car                   |            |                    | <b>Standard Level</b>                  |                                          |                | California LEV-IV SULEV30               |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | US06                                    |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>                           | <b>Std</b> |
| 150,000 miles        | CO                   | --                                  | --         | --                 | --                                     | --                                       | --             | 0.22                                    | 9.6        |
| 150,000 miles        | NMOG                 | --                                  | --         | 1.03               | --                                     | --                                       | --             | 0.0036                                  | 99.999     |
| 150,000 miles        | NMOG+NOX             | --                                  | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.030      |
| 150,000 miles        | NOX                  | --                                  | --         | --                 | --                                     | --                                       | --             | 0.0016                                  | 99.999     |
| 150,000 miles        | PM                   | --                                  | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.003      |
|                      |                      |                                     |            |                    |                                        |                                          |                |                                         |            |
| <b>Cert Region</b>   |                      | California + CAA Section 177 states |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                                    |            |
| <b>Vehicle Class</b> |                      | LDV/Passenger Car                   |            |                    | <b>Standard Level</b>                  |                                          |                | California LEV-IV SULEV30               |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | Cold CO                                 |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>                           | <b>Std</b> |
| 50,000 miles         | CO                   | --                                  | --         | --                 | --                                     | --                                       | --             | 0.07                                    | 10.0       |
|                      |                      |                                     |            |                    |                                        |                                          |                |                                         |            |
| <b>Cert Region</b>   |                      | California + CAA Section 177 states |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                                    |            |
| <b>Vehicle Class</b> |                      | LDV/Passenger Car                   |            |                    | <b>Standard Level</b>                  |                                          |                | California LEV-IV SULEV30               |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | Federal fuel 2-day exhaust (w/can load) |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>                           | <b>Std</b> |
| 150,000 miles        | CO                   | --                                  | --         | --                 | --                                     | --                                       | --             | 0.22                                    | 1.0        |
| 150,000 miles        | HCHO                 | --                                  | --         | --                 | --                                     | --                                       | --             | --                                      | 0.004      |
| 150,000 miles        | NMOG                 | --                                  | --         | 1.1                | --                                     | --                                       | --             | 0.0036                                  | 99.999     |
| 150,000 miles        | NMOG+NOX             | --                                  | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.030      |
| 150,000 miles        | NOX                  | --                                  | --         | --                 | --                                     | --                                       | --             | 0.0016                                  | 99.999     |
| 150,000 miles        | PM                   | --                                  | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.001      |

## Certification Summary Information Report

|                      |                      |                                     |            |                    |                                        |                                          |                |                           |            |
|----------------------|----------------------|-------------------------------------|------------|--------------------|----------------------------------------|------------------------------------------|----------------|---------------------------|------------|
| <b>Test Group</b>    |                      | VHYXT01.6M13                        |            |                    | Evaporative/Refueling Family           |                                          |                | VHYXR0137M1G              |            |
| <b>Cert Region</b>   |                      | California + CAA Section 177 states |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                      |            |
| <b>Vehicle Class</b> |                      | LDV/Passenger Car                   |            |                    | <b>Standard Level</b>                  |                                          |                | California LEV-IV SULEV30 |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | Fed. fuel 50 F exh.       |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>             | <b>Std</b> |
| 4,000 miles          | CO                   | --                                  | --         | --                 | --                                     | --                                       | --             | --                        | 1.0        |
| 4,000 miles          | HCHO                 | --                                  | --         | --                 | --                                     | --                                       | --             | --                        | 0.008      |
| 4,000 miles          | NMOG                 | --                                  | --         | 1.1                | --                                     | --                                       | --             | --                        | 99.999     |
| 4,000 miles          | NMOG+NOX             | --                                  | --         | --                 | --                                     | --                                       | 1              | --                        | 0.060      |
| 4,000 miles          | NOX                  | --                                  | --         | --                 | --                                     | --                                       | --             | --                        | 99.999     |
|                      |                      |                                     |            |                    |                                        |                                          |                |                           |            |
| <b>Cert Region</b>   |                      | California + CAA Section 177 states |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                      |            |
| <b>Vehicle Class</b> |                      | LDV/Passenger Car                   |            |                    | <b>Standard Level</b>                  |                                          |                | California LEV-IV SULEV30 |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | HWFE                      |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>             | <b>Std</b> |
| 150,000 miles        | NMOG                 | --                                  | --         | 1.03               | --                                     | --                                       | --             | 0.0036                    | 99.999     |
| 150,000 miles        | NMOG+NOX             | --                                  | --         | --                 | --                                     | --                                       | --             | 0                         | 0.030      |
| 150,000 miles        | NOX                  | --                                  | --         | --                 | --                                     | --                                       | --             | 0.0016                    | 99.999     |
|                      |                      |                                     |            |                    |                                        |                                          |                |                           |            |
| <b>Cert Region</b>   |                      | Federal                             |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                      |            |
| <b>Vehicle Class</b> |                      | LDT2 (LVW 3751-5750, GVW 0-6000)    |            |                    | <b>Standard Level</b>                  |                                          |                | Federal Tier 3 Bin 30     |            |
| <b>Fuel</b>          |                      | Gasoline                            |            |                    | <b>Test Procedure</b>                  |                                          |                | HWFE                      |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>               | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>             | <b>Std</b> |
| 120,000 miles        | CREE                 | --                                  | --         | --                 | --                                     | --                                       | --             | 0.229467                  | 999        |
| 150,000 miles        | NMOG                 | --                                  | --         | 1.03               | --                                     | --                                       | --             | 0.0036                    | 99.999     |
| 150,000 miles        | NMOG+NOX             | --                                  | --         | --                 | --                                     | --                                       | --             | 0                         | 0.030      |
| 150,000 miles        | NOX                  | --                                  | --         | --                 | --                                     | --                                       | --             | 0.0016                    | 99.999     |

## Certification Summary Information Report

|                      |                      |                                  |            |                    |                                        |                                          |                |                                         |            |
|----------------------|----------------------|----------------------------------|------------|--------------------|----------------------------------------|------------------------------------------|----------------|-----------------------------------------|------------|
| <b>Test Group</b>    |                      | VHYXT01.6M13                     |            |                    | <b>Evaporative/Refueling Family</b>    |                                          |                | VHYXR0137M1G                            |            |
| <b>Cert Region</b>   |                      | Federal                          |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                                    |            |
| <b>Vehicle Class</b> |                      | LDT2 (LVW 3751-5750, GVW 0-6000) |            |                    | <b>Standard Level</b>                  |                                          |                | Federal Tier 3 Bin 30                   |            |
| <b>Fuel</b>          |                      | Gasoline                         |            |                    | <b>Test Procedure</b>                  |                                          |                | Federal fuel 2-day exhaust (w/can load) |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>            | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>                           | <b>Std</b> |
| 120,000 miles        | CREE                 | --                               | --         | --                 | --                                     | --                                       | --             | 0.229467                                | 999        |
| 120,000 miles        | METHANE              | --                               | --         | --                 | --                                     | --                                       | --             | 0.0014                                  | 0.030      |
| 120,000 miles        | N2O                  | --                               | --         | --                 | --                                     | --                                       | --             | 0.001                                   | 0.010      |
| 150,000 miles        | CO                   | --                               | --         | --                 | --                                     | --                                       | --             | 0.22                                    | 1.0        |
| 150,000 miles        | CO-COMP              | --                               | --         | --                 | --                                     | --                                       | --             | 0                                       | 4.2        |
| 150,000 miles        | HCHO                 | --                               | --         | --                 | --                                     | --                                       | --             | --                                      | 0.004      |
| 150,000 miles        | NMOG                 | --                               | --         | 1.1                | --                                     | --                                       | --             | 0.0036                                  | 99.999     |
| 150,000 miles        | NMOG+NOX             | --                               | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.030      |
| 150,000 miles        | NMOG+NOX-COMP        | --                               | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.030      |
| 150,000 miles        | NOX                  | --                               | --         | --                 | --                                     | --                                       | --             | 0.0016                                  | 99.999     |
| 150,000 miles        | PM                   | --                               | --         | --                 | --                                     | --                                       | --             | 0                                       | 0.003      |

|                      |                      |                                  |            |                    |                                        |                                          |                |                       |            |
|----------------------|----------------------|----------------------------------|------------|--------------------|----------------------------------------|------------------------------------------|----------------|-----------------------|------------|
| <b>Cert Region</b>   |                      | Federal                          |            |                    | <b>Cert/In-Use Code</b>                |                                          |                | Cert                  |            |
| <b>Vehicle Class</b> |                      | LDT2 (LVW 3751-5750, GVW 0-6000) |            |                    | <b>Standard Level</b>                  |                                          |                | Federal Tier 3 Bin 30 |            |
| <b>Fuel</b>          |                      | Gasoline                         |            |                    | <b>Test Procedure</b>                  |                                          |                | Cold CO               |            |
| <b>Useful Life</b>   | <b>Emission Name</b> | <b>Rounded Result</b>            | <b>RAF</b> | <b>NMOG / NMHC</b> | <b>Upward Diesel Adjustment Factor</b> | <b>Downward Diesel Adjustment Factor</b> | <b>Mult DF</b> | <b>Add DF</b>         | <b>Std</b> |
| 50,000 miles         | CO                   | --                               | --         | --                 | --                                     | --                                       | --             | 0.07                  | 12.5       |
| 120,000 miles        | HC-NM                | --                               | --         | --                 | --                                     | --                                       | --             | 0.0025                | 0.3        |

## Evaporative/Refueling Standards

|                              |               |                          |                |                |        |                                        |  |
|------------------------------|---------------|--------------------------|----------------|----------------|--------|----------------------------------------|--|
| Evaporative/Refueling Family |               | VHYXR0137M1G             |                | Cert Region    |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                     |                | Standard Level |        | California LEV-IV Zero Evap (Option 2) |  |
| Test Procedure               |               | Evap Canister Bleed Test |                |                |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name            | Rounded Result | Std            | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL                 | --             | 0.020          | 0      |                                        |  |

## Certification Summary Information Report

|                              |               |                                    |                |                              |        |                                        |  |
|------------------------------|---------------|------------------------------------|----------------|------------------------------|--------|----------------------------------------|--|
| Test Group                   |               | VHYXT01.6M13                       |                | Evaporative/Refueling Family |        | VHYXR0137M1G                           |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | 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                     | --             | 0.400                        | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | Federal                                |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | Federal Tier 3 Evap                    |  |
| Test Procedure               |               | Leak Test - Port Near Canister     |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | LEAK-DIA                           | --             | 0.020                        | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | Federal                                |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | Federal Tier 3 Evap                    |  |
| Test Procedure               |               | Evap Canister Bleed Test           |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL                           | --             | 0.020                        | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | Federal                                |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | Federal Tier 3 Evap                    |  |
| Test Procedure               |               | California Fuel Running Loss       |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL-EQUIV                     | --             | 0.05                         | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | California LEV-IV Zero Evap (Option 2) |  |
| Test Procedure               |               | Federal fuel refueling test (ORVR) |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL-EQUIV                     | --             | 0.20                         | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | Federal                                |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | Federal Tier 3 Evap                    |  |
| Test Procedure               |               | California fuel 2-day evap         |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL-EQUIV                     | --             | 0.400                        | 0      |                                        |  |

## Certification Summary Information Report

|                              |               |                                    |                |                              |        |                                        |  |
|------------------------------|---------------|------------------------------------|----------------|------------------------------|--------|----------------------------------------|--|
| Test Group                   |               | VHYXT01.6M13                       |                | Evaporative/Refueling Family |        | VHYXR0137M1G                           |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | California LEV-IV 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                     | --             | 0.300                        | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | California LEV-IV 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 |               | VHYXR0137M1G                       |                | Cert Region                  |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | California LEV-IV Zero Evap (Option 2) |  |
| Test Procedure               |               | Leak Test - Port Near Canister     |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | LEAK-DIA                           | --             | 0.02                         | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | Federal                                |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | Federal Tier 3 Evap                    |  |
| Test Procedure               |               | Federal fuel refueling test (ORVR) |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL-EQUIV                     | --             | 0.20                         | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |
| Evaporative/Refueling Family |               | VHYXR0137M1G                       |                | Cert Region                  |        | California + CAA Section 177 states    |  |
| Cert/In-Use Code             |               | Cert                               |                | Standard Level               |        | California LEV-IV Zero Evap (Option 2) |  |
| Test Procedure               |               | California fuel 2-day evap         |                |                              |        |                                        |  |
| Fuel                         | Useful Life   | Emission Name                      | Rounded Result | Std                          | Add DF |                                        |  |
| Gasoline                     | 150,000 miles | HC-TOTAL-EQUIV                     | --             | 0.300                        | 0      |                                        |  |
|                              |               |                                    |                |                              |        |                                        |  |

Certification Summary Information Report

|                              |  |                                 |  |                              |  |                                        |  |       |  |        |  |
|------------------------------|--|---------------------------------|--|------------------------------|--|----------------------------------------|--|-------|--|--------|--|
| Test Group                   |  | VHYXT01.6M13                    |  | Evaporative/Refueling Family |  | VHYXR0137M1G                           |  |       |  |        |  |
| Evaporative/Refueling Family |  | VHYXR0137M1G                    |  | Cert Region                  |  | Federal                                |  |       |  |        |  |
| Cert/In-Use Code             |  | Cert                            |  | Standard Level               |  | Federal Tier 3 Evap                    |  |       |  |        |  |
| Test Procedure               |  | Leak Test - Port Near Fuel Pipe |  |                              |  |                                        |  |       |  |        |  |
| Fuel                         |  | Useful Life                     |  | Emission Name                |  | Rounded Result                         |  | Std   |  | Add DF |  |
| Gasoline                     |  | 150,000 miles                   |  | LEAK-DIA                     |  | --                                     |  | 0.020 |  | 0      |  |
|                              |  |                                 |  |                              |  |                                        |  |       |  |        |  |
| Evaporative/Refueling Family |  | VHYXR0137M1G                    |  | Cert Region                  |  | California + CAA Section 177 states    |  |       |  |        |  |
| Cert/In-Use Code             |  | Cert                            |  | Standard Level               |  | California LEV-IV Zero Evap (Option 2) |  |       |  |        |  |
| Test Procedure               |  | Leak Test - Port Near Fuel Pipe |  |                              |  |                                        |  |       |  |        |  |
| Fuel                         |  | Useful Life                     |  | Emission Name                |  | Rounded Result                         |  | Std   |  | Add DF |  |
| Gasoline                     |  | 150,000 miles                   |  | LEAK-DIA                     |  | --                                     |  | 0.02  |  | 0      |  |

## Certification Summary Information Report

| Test Group           |                                                                 | VHYXT01.6M13       | Evaporative/Refueling Family                       | VHYXR0137M1G |
|----------------------|-----------------------------------------------------------------|--------------------|----------------------------------------------------|--------------|
| Glossary             |                                                                 |                    |                                                    |              |
| <b>Useful Life</b>   |                                                                 |                    |                                                    |              |
| 4                    | 4,000 miles                                                     | 120                | 120,000 miles                                      |              |
| 50                   | 50,000 miles                                                    | 150                | 150,000 miles                                      |              |
| 100                  | 100,000 miles                                                   |                    |                                                    |              |
| <b>Emission Name</b> |                                                                 |                    |                                                    |              |
| HC-TOTAL             | Total Hydrocarbon                                               | COMB-CREE          | Combined Carbon-Related Exhaust Emissions          |              |
| CO                   | Carbon Monoxide                                                 | COMB-OPT-CREE      | Combined Optional Carbon-Related Exhaust Emissions |              |
| CO2                  | Carbon dioxide                                                  | HC-TOTAL-EQUIV     | Total Hydrocarbon equivalent - Evap only           |              |
| CREE                 | Carbon-Related Exhaust Emissions                                | METHANE-COMB       | Combined CH4 for HD 2b/3 vehicles only             |              |
| OPT-CREE             | Optional Carbon-Related Exhaust Emissions                       | N2O-COMB           | Combined Nitrous Oxide for HD 2b/3 vehicles only   |              |
| NOX                  | Nitrogen Oxide                                                  | LEAK-DIA           | Effective Leak Diameter (inches)                   |              |
| PM                   | Particulate Matter                                              | LEAK-GAS CAP       | Gas Cap Leakage (cc/min)                           |              |
| PM-COMP              | SFTP Composite Particulate Matter                               | CO2-COMB           | Combined Carbon Dioxide for HD 2b/3 Vehicles Only  |              |
| HC-NM                | Non-methane Hydrocarbon                                         | KW-HRS             | Integrated DC KW-HRS                               |              |
| OMHCE                | Organic material Hydrocarbon Equivalent                         | CH4 BAG 1          | Bag 1 Methane                                      |              |
| OMNMHCE              | Organic material non-methane HC equivalent                      | CH4 BAG 2          | Bag 2 Methane                                      |              |
| NMOG                 | Non-methane organic gases                                       | CH4 BAG 3          | Bag 3 Methane                                      |              |
| HCHO                 | Formaldehyde                                                    | CH4 BAG 4          | Bag 4 Methane                                      |              |
| H3C2HO               | Acetaldehyde                                                    | CO BAG 1           | Bag 1 Carbon Monoxide                              |              |
| HC-NM+NOX            | SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03 | CO BAG 2           | Bag 2 Carbon Monoxide                              |              |
| HC-NM+NOX-COMP       | SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides        | CO BAG 3           | Bag 3 Carbon Monoxide                              |              |
| CO-COMP              | SFTP Composite Carbon Monoxide                                  | CO BAG 4           | Bag 4 Carbon Monoxide                              |              |
| ETHANOL              | C2H5OH - Ethanol                                                | NMOG BAG 1         | Bag 1 Non-methane organic gases                    |              |
| FE BAG 1             | Bag 1 Fuel Economy                                              | NMOG BAG 2         | Bag 2 Non-methane organic gases                    |              |
| FE BAG 2             | Bag 2 Fuel Economy                                              | NMOG BAG 3         | Bag 3 Non-methane organic gases                    |              |
| FE BAG 3             | Bag 3 Fuel Economy                                              | NMOG BAG 4         | Bag 4 Non-methane organic gases                    |              |
| FE BAG 4             | Bag 4 Fuel Economy                                              | ACT-DISTANCE BAG 1 | Bag 1 Actual Distance                              |              |
| MFR FE               | Manufacturer Fuel Economy                                       | ACT-DISTANCE BAG 2 | Bag 2 Actual Distance                              |              |
| HC                   | Hydrocarbon for Running Loss and ORVR                           | ACT-DISTANCE BAG 3 | Bag 3 Actual Distance                              |              |
| METHANE              | CH4 - Methane                                                   | ACT-DISTANCE BAG 4 | Bag 4 Actual Distance                              |              |
| METHANOL             | CH3OH - Methanol                                                | HC-TOTAL BAG 1     | Bag 1 Total Hydrocarbon                            |              |
| N2O                  | Nitrous Oxide                                                   | HC-TOTAL BAG 2     | Bag 2 Total Hydrocarbon                            |              |
| SPITBACK             | Spitback Hydrocarbon in grams                                   | HC-TOTAL BAG 3     | Bag 3 Total Hydrocarbon                            |              |
| AMP-HRS              | Integrated Amp-hours                                            | HC-TOTAL BAG 4     | Bag 4 Total Hydrocarbon                            |              |
| START-SOC            | System Start State of Charge Watt-hours                         | WATT-HRS BAG 1     | Bag 1 Watt Hours                                   |              |
| END-SOC              | System End State of Charge Watt-hours                           | WATT-HRS BAG 2     | Bag 2 Watt Hours                                   |              |

## Certification Summary Information Report

| Test Group                             |                                                            | VHYXT01.6M13 | Evaporative/Refueling Family |                                                 | VHYXR0137M1G |
|----------------------------------------|------------------------------------------------------------|--------------|------------------------------|-------------------------------------------------|--------------|
| ACT-DISTANCE                           | Actual Distance Driven (miles)                             |              | WATT-HRS BAG 3               | Bag 3 Watt Hours                                |              |
| AS-VOLT                                | Average System Voltage                                     |              | WATT-HRS BAG 4               | Bag 4 Watt Hours                                |              |
| CO2 BAG 1                              | Bag 1 Carbon Dioxide                                       |              | WATT-HRS                     | Watt Hours                                      |              |
| CO2 BAG 2                              | Bag 2 Carbon Dioxide                                       |              | HC-NM BAG 1                  | Bag 1 Non-methane Hydrocarbon                   |              |
| CO2 BAG 3                              | Bag 3 Carbon Dioxide                                       |              | HC-NM BAG 2                  | Bag 2 Non-methane Hydrocarbon                   |              |
| CO2 BAG 4                              | Bag 4 Carbon Dioxide                                       |              | HC-NM BAG 3                  | Bag 3 Non-methane Hydrocarbon                   |              |
| NMOG+NOX                               | Non-methane organic gases plus Nitrogen Oxides             |              | HC-NM BAG 4                  | Bag 4 Non-methane Hydrocarbon                   |              |
| NMOG+NOX-COMP                          | SFTP Composite Non-methane Organic Gases + Nitrogen Oxides |              | N2O BAG 1                    | Bag 1 Nitrous Oxide                             |              |
| DT-IWRR                                | Drive Trace Inertia Work Ratio Rating                      |              | N2O BAG 2                    | Bag 2 Nitrous Oxide                             |              |
| DT-ASCR                                | Drive Trace Absolute Speed Change Rating                   |              | N2O BAG 3                    | Bag 3 Nitrous Oxide                             |              |
| DT-EER                                 | Drive Trace Energy Economy Rating                          |              | N2O BAG 4                    | Bag 4 Nitrous Oxide                             |              |
| <b>Certification Region</b>            |                                                            |              |                              |                                                 |              |
| CA                                     | California + CAA Section 177 states                        |              | FA                           | Federal                                         |              |
| <b>Exhaust Emission Standard Level</b> |                                                            |              |                              |                                                 |              |
| B1                                     | Federal Tier 2 Bin 1                                       |              | HDV2B340                     | Federal Tier 3 HD Class 2b Transitional Bin 340 |              |
| B2                                     | Federal Tier 2 Bin 2                                       |              | HDV2B250                     | Federal Tier 3 HD Class 2b Bin 250              |              |
| B3                                     | Federal Tier 2 Bin 3                                       |              | HDV2B200                     | Federal Tier 3 HD Class 2b Bin 200              |              |
| B4                                     | Federal Tier 2 Bin 4                                       |              | HDV2B170                     | Federal Tier 3 HD Class 2b Bin 170              |              |
| B5                                     | Federal Tier 2 Bin 5                                       |              | HDV2B150                     | Federal Tier 3 HD Class 2b Bin 150              |              |
| B6                                     | Federal Tier 2 Bin 6                                       |              | HDV2B0                       | Federal Tier 3 HD Class 2b Bin 0                |              |
| B7                                     | Federal Tier 2 Bin 7                                       |              | HDV3B630                     | Federal Tier 3 HD Class 3 Transitional Bin 630  |              |
| B8                                     | Federal Tier 2 Bin 8                                       |              | HDV3B570                     | Federal Tier 3 HD Class 3 Transitional Bin 570  |              |
| B9                                     | Federal Tier 2 Bin 9                                       |              | HDV3B400                     | Federal Tier 3 HD Class 3 Bin 400               |              |
| B10                                    | Federal Tier 2 Bin 10                                      |              | HDV3B270                     | Federal Tier 3 HD Class 3 Bin 270               |              |
| B11                                    | Federal Tier 2 Bin 11                                      |              | HDV3B230                     | Federal Tier 3 HD Class 3 Bin 230               |              |
| HDV1                                   | HDV1 (Federal HD chassis Class 2b GVW 8501-10000)          |              | HDV3B200                     | Federal Tier 3 HD Class 3 Bin 200               |              |
| HDV2                                   | HDV2 (Federal HD chassis Class 3 GVW 10001-14000)          |              | HDV3B0                       | Federal Tier 3 HD Class 3 Bin 0                 |              |
| L2                                     | California LEV-II LEV                                      |              | L4SULEV100                   | California LEV-IV SULEV100                      |              |
| L2OP                                   | California LEV-II LEV Optional                             |              | L4SULEV125                   | California LEV-IV SULEV125                      |              |
| U2                                     | California LEV-II ULEV                                     |              | L4SULEV15                    | California LEV-IV SULEV15                       |              |
| S2                                     | California LEV-II SULEV                                    |              | L4SULEV150                   | California LEV-IV SULEV150                      |              |
| ZEV                                    | California ZEV                                             |              | L4SULEV170                   | California LEV-IV SULEV170                      |              |
| OT                                     | Other                                                      |              | L4SULEV175                   | California LEV-IV SULEV175                      |              |
| T1                                     | Federal Tier 1                                             |              | L4SULEV20                    | California LEV-IV SULEV20                       |              |
| PZEV                                   | California PZEV                                            |              | L4SULEV200                   | California LEV-IV SULEV200                      |              |
| L2LEV160                               | California LEV-II LEV160                                   |              | L4SULEV230                   | California LEV-IV SULEV230                      |              |
| L2ULEV125                              | California LEV-II ULEV125                                  |              | L4SULEV25                    | California LEV-IV SULEV25                       |              |
| L2SULEV30                              | California LEV-II SULEV30                                  |              | L4SULEV30                    | California LEV-IV SULEV30                       |              |
| L2LEV395                               | California LEV-II LEV395                                   |              | L4SULEV75                    | California LEV-IV SULEV75                       |              |

## Certification Summary Information Report

| Test Group                    |                                                                   | VHYXT01.6M13 | Evaporative/Refueling Family                             |                            | VHYXR0137M1G |
|-------------------------------|-------------------------------------------------------------------|--------------|----------------------------------------------------------|----------------------------|--------------|
| L2ULEV340                     | California LEV-II ULEV340                                         |              | L4SULEV85                                                | California LEV-IV SULEV85  |              |
| L2LEV630                      | California LEV-II LEV630                                          |              | L4ULEV125                                                | California LEV-IV ULEV125  |              |
| L2ULEV570                     | California LEV-II ULEV570                                         |              | L4ULEV200                                                | California LEV-IV ULEV200  |              |
| L3LEV160                      | California LEV-III LEV160                                         |              | L4ULEV250                                                | California LEV-IV ULEV250  |              |
| L3ULEV125                     | California LEV-III ULEV125                                        |              | L4ULEV270                                                | California LEV-IV ULEV270  |              |
| L3ULEV70                      | California LEV-III ULEV70                                         |              | L4ULEV40                                                 | California LEV-IV ULEV40   |              |
| L3ULEV50                      | California LEV-III ULEV50                                         |              | L4ULEV400                                                | California LEV-IV ULEV400  |              |
| L3SULEV30                     | California LEV-III SULEV30                                        |              | L4ULEV50                                                 | California LEV-IV ULEV50   |              |
| L3SULEV20                     | California LEV-III SULEV20                                        |              | L4ULEV60                                                 | California LEV-IV ULEV60   |              |
| L3LEV395                      | California LEV-III LEV395                                         |              | L4ULEV70                                                 | California LEV-IV ULEV70   |              |
| L3ULEV340                     | California LEV-III ULEV340                                        |              | T4B170                                                   | Federal Tier 4 MDV Bin 170 |              |
| L3ULEV250                     | California LEV-III ULEV250                                        |              | T4B150                                                   | Federal Tier 4 MDV Bin 150 |              |
| L3ULEV200                     | California LEV-III ULEV200                                        |              | T4B125                                                   | Federal Tier 4 MDV Bin 125 |              |
| L3SULEV170                    | California LEV-III SULEV170                                       |              | T4B100                                                   | Federal Tier 4 MDV Bin 100 |              |
| L3SULEV150                    | California LEV-III SULEV150                                       |              | T4B85                                                    | Federal Tier 4 MDV Bin 85  |              |
| L3LEV630                      | California LEV-III LEV630                                         |              | T4B75                                                    | Federal Tier 4 MDV Bin 75  |              |
| L3ULEV570                     | California LEV-III ULEV570                                        |              | T4B70                                                    | Federal Tier 4 Bin 70      |              |
| L3ULEV400                     | California LEV-III ULEV400                                        |              | T4B65                                                    | Federal Tier 4 Bin 65      |              |
| L3ULEV270                     | California LEV-III ULEV270                                        |              | T4B60                                                    | Federal Tier 4 Bin 60      |              |
| L3SULEV230                    | California LEV-III SULEV230                                       |              | T4B55                                                    | Federal Tier 4 Bin 55      |              |
| L3SULEV200                    | California LEV-III SULEV200                                       |              | T4B50                                                    | Federal Tier 4 Bin 50      |              |
| T3B160                        | Federal Tier 3 Bin 160                                            |              | T4B45                                                    | Federal Tier 4 Bin 45      |              |
| T3B125                        | Federal Tier 3 Bin 125                                            |              | T4B40                                                    | Federal Tier 4 Bin 40      |              |
| T3B110                        | Federal Tier 3 Transitional Bin 110                               |              | T4B35                                                    | Federal Tier 4 Bin 35      |              |
| T3B85                         | Federal Tier 3 Transitional Bin 85                                |              | T4B30                                                    | Federal Tier 4 Bin 30      |              |
| T3SULEV30                     | Federal Tier 3 Transitional LEV-II SULEV30 Carryover              |              | T4B25                                                    | Federal Tier 4 Bin 25      |              |
| T3B70                         | Federal Tier 3 Bin 70                                             |              | T4B20                                                    | Federal Tier 4 Bin 20      |              |
| T3B50                         | Federal Tier 3 Bin 50                                             |              | T4B15                                                    | Federal Tier 4 Bin 15      |              |
| T3B30                         | Federal Tier 3 Bin 30                                             |              | T4B10                                                    | Federal Tier 4 Bin 10      |              |
| T3B20                         | Federal Tier 3 Bin 20                                             |              | T4B5                                                     | Federal Tier 4 Bin 5       |              |
| T3B0                          | Federal Tier 3 Bin 0                                              |              | T4B0                                                     | Federal Tier 4 Bin 0       |              |
| HDV2B395                      | Federal Tier 3 HD Class 2b Transitional Bin 395                   |              |                                                          |                            |              |
| <b>Transmission Type Code</b> |                                                                   |              |                                                          |                            |              |
| AMS                           | Automated Manual- Selectable (e.g. Automated Manual with paddles) | M            | Manual                                                   |                            |              |
| A                             | Automatic                                                         | OT           | Other                                                    |                            |              |
| AM                            | Automated Manual                                                  | SA           | Semi-Automatic                                           |                            |              |
| CVT                           | Continuously Variable                                             | SCV          | Selectable Continuously Variable (e.g. CVT with paddles) |                            |              |
| <b>Drive System Code</b>      |                                                                   |              |                                                          |                            |              |
| 4                             | 4-Wheel Drive                                                     | P            | Part-time 4-Wheel Drive                                  |                            |              |

Certification Summary Information Report

| Test Group                    |                                 | VHYXT01.6M13 | Evaporative/Refueling Family |                                  | VHYXR0137M1G |
|-------------------------------|---------------------------------|--------------|------------------------------|----------------------------------|--------------|
| 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                     |              |