**1- Package Content & Revision History**

**GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel**

The following is a listing of the contents of this ALPHA Map Data Package along with the suggested citation format and revision history of the material. Use of any NCAT documents listed below, included as part of the complete test data package, should reference the suggested citation provided. Note that SAE Papers included in the package should utilize the designated SAE CITATION format.

**SUGGESTED CITATION:**

*GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel – ALPHA Map Package*. Version 2023-06. Ann Arbor, MI: US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2023.

**TEST PACKAGE CONTENTS:**

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| 1– Package Content & Revision History.docx | Brief overview document listing the contents, revision history & suggested citation format of the package |
| 2– Related NCAT Packages.docx | Listing of related NCAT Test Data and ALPHA Engine Map Packages |
| 3a– GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel– ALPHA Generation Process.html | NCAT summary report describing the process followed to generate a full engine fuel consumption map |
| 3b– Engine Efficiency Technology Study Final Report for Argonne National Lab.pdf | Final report provided to Argonne National Laboratory describing the GT-Power modeling work conducted for SwRI Project No. 03.26457 |
| 3c– GT Power 2020 GM 3.0L Duramax Engine Diesel Fuel – Test Data File.xlsx | A variable file containing data collected from GT-Power modeling; parameters include speeds, loads, temperatures, and pressures |
| 4– GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel – BSFC.pdf | Contour plot of the BSFC results of the mapping over the full operational area of the engine |
| 5- GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel – Efficiency.pdf | Contour plot of the Brake Thermal Efficiency results of the mapping over the full operational area of the engine |
| 6- GT Power 2020 GM 3.0L Duramax Engine from Argonne Report Diesel Fuel – Fuel Map Data.xlsx | Data derived using the generated map to confirm expected trends in the output fuel map |
| 7– engine\_GTP\_2020\_GM\_Duramax\_3L0\_  Diesel\_report\_image\_Diesel.m | ALPHA output result text file |

**REVISION HISTORY:**

Version 2023-06: Updated minimum torque data selection points for plotting

Version 2023-05: Updated minimum torque data to reflect proper values as supplied by SwRI

Version 2023-03: Initial release