

**EMISSIONS SUMMARY REPORT**

|                    |   |                       |  |
|--------------------|---|-----------------------|--|
| Vehicle ID:        | <b>V6DS63822 / 031M450</b>                      | Test ID:              | <b>V6DS63822_US2XSP020720070101 / 1111015747</b> |
| Test Req:          | <b>082012200801-6</b>                           | Location:             | CHRYSLER TECH CENTER                             |
| Test Type:         | <b>US06(2X) – using Split Bag US06</b>          | Facility:             | <b>Test Cell 7</b>                               |
| Requestor:         | <b>REDACTED</b>                                 | Shift Sched.:         | AUTO   |
| Driver:            | <b>REDACTED</b>                                 | Option(s):            | Tailpipe modal & Bag                             |
| Operator:          | <b>REDACTED</b>                                 | Fuel Type:            | MS10756  |
| Start Odometer:    | 117074  | Fuel Anal.#:          | 10892  |
| AutoLoad File:     | None  | INCA Project File:    | V6DS63822_16DS30_CD_TP.exp                       |
| Cell Temp Set Pt:  | 75  | Altitude Set Pt(ft.): | 930  |
| Test Segment:      | 3/3   | Vehicle Desc.:        | 0.00 1500 RAM WHITE                              |
| Test Req. Purpose: | V6DS63822 – Consent Decree – Tailpipe Emissions |                       |  |
| Seq. Purpose:      | US06 – MY16 DS – Consent Decree Tailpipe        |                       |  |

|        | <b>Individual Cycles:(Grams/Mile)</b> |             |            |           |            |            |           |            | <b>Tailpipe:</b> |            |           |              |
|--------|---------------------------------------|-------------|------------|-----------|------------|------------|-----------|------------|------------------|------------|-----------|--------------|
|        | <b>HC</b>                             | <b>NMHC</b> | <b>CH4</b> | <b>CO</b> | <b>NOX</b> | <b>CO2</b> | <b>NO</b> | <b>NO2</b> | <b>ExVol</b>     | <b>MPG</b> | <b>DM</b> | <b>Miles</b> |
| Cycle1 | .0115                                 | .0036       | .0112      | .0023     | .1503      | 692.8      | .1579     | .0240      | 53.0             | 14.6830    |           | .263         |
| Cycle2 | .0068                                 | .0037       | .0044      | .0017     | .1600      | 498.7      | .1655     | .0139      | 141.7            | 20.3915    |           | 1.015        |
| Cycle3 | .0046                                 | .0023       | .0031      | .0009     | .0532      | 380.7      | .0562     | .0069      | 567.6            | 26.7071    |           | 6.227        |
| Cycle4 | .0144                                 | .0055       | .0127      | .0006     | .1900      | 969.4      | .2074     | .0259      | 87.9             | 10.5009    |           | .274         |
| Cycle5 | .0114                                 | .0061       | .0076      | .0017     | .8598      | 918.8      | .9404     | .0944      | 58.9             | 11.0723    |           | .221         |

| <b>Modal Test Results:(Grams)</b> |  |              |              |              |              |              |              |              |              |                |          |              |
|-----------------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------|--------------|
| Phase: 1                          |  |              |              |              |              |              |              |              |              |                |          |              |
| IDLE                              | .0008  | .0002        | .0007        | .0000        | .0008        | 16.6         | .0005        | .0000        | 14.6         | .1837          |          | 0            |
| ACCEL                             | .0099  | .0044        | .0076        | .0021        | .3092        | 880.0        | .3628        | .0192        | 204.1        | 8.9180         |          | 0            |
| DECEL                             | .0058  | .0029        | .0042        | .0007        | .1342        | 260.6        | .1111        | .0292        | 122.7        | 39.1349        |          | 0            |
| TOTAL                             | .0164  | .0075        | .0125        | .0028        | .4442        | 1157.3       | .4744        | .0484        | 341.4        |                |          | 0            |
| Phase: 1                          | <u>Equivalent Mass Results: (Grams/Mile)</u> |              |              |              |              |              |              |              |              |                |          |              |
|                                   | <b>.0093</b>                                 | <b>.0042</b> | <b>.0071</b> | <b>.0016</b> | <b>.2505</b> | <b>652.6</b> | <b>.2675</b> | <b>.0273</b> | <b>341.4</b> | <b>15.5825</b> | <b>0</b> | <b>1.773</b> |

|          |  |              |              |              |              |              |              |              |              |                |          |              |
|----------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------|--------------|
| Phase: 2 |  |              |              |              |              |              |              |              |              |                |          |              |
| IDLE     | .0003  | .0001        | .0002        | .0000        | .0001        | 4.0          | .0000        | .0000        | 3.1          |                |          | 0            |
| ACCEL    | .0134  | .0076        | .0075        | .0039        | .2506        | 1068.5       | .2741        | .0353        | 231.8        | 18.0415        |          | 0            |
| CRUISE   | .0101  | .0046        | .0079        | .0012        | .0591        | 1028.4       | .0584        | .0041        | 234.0        | 30.1945        |          | 0            |
| DECEL    | .0048  | .0022        | .0037        | .0003        | .0215        | 269.7        | .0177        | .0035        | 98.7         | 48.2238        |          | 0            |
| TOTAL    | .0286  | .0146        | .0192        | .0055        | .3313        | 2370.6       | .3502        | .0429        | 567.6        |                |          | 0            |
| Phase: 2 | <u>Equivalent Mass Results: (Grams/Mile)</u> |              |              |              |              |              |              |              |              |                |          |              |
|          | <b>.0046</b>                                 | <b>.0023</b> | <b>.0031</b> | <b>.0009</b> | <b>.0532</b> | <b>380.7</b> | <b>.0562</b> | <b>.0069</b> | <b>567.6</b> | <b>26.7071</b> | <b>0</b> | <b>6.227</b> |

|           |  |       |       |       |       |       |  |  |       |         |  |   |
|-----------|--|-------|-------|-------|-------|-------|--|--|-------|---------|--|---|
| Phase: 1A |  |       |       |       |       |       |  |  |       |         |  |   |
| IDLE      | .0004  | .0001 | .0003 | .0000 | .0001 | 7.9   |  |  | 6.0   |         |  | 0 |
| ACCEL     | .0063  | .0029 | .0046 | .0018 | .1782 | 564.8 |  |  | 122.6 | 10.1047 |  | 0 |
| DECEL     | .0032  | .0016 | .0025 | .0005 | .0236 | 115.7 |  |  | 66.2  | 63.1989 |  | 0 |
| TOTAL     | .0099  | .0047 | .0074 | .0023 | .2019 | 688.4 |  |  | 194.7 |         |  | 0 |
| Phase: 1A | <u>Equivalent Mass Results: (Grams/Mile)</u> |       |       |       |       |       |  |  |       |         |  |   |

Modal Test Results

|  |              |              |              |              |              |              |  |              |                |          |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--------------|----------------|----------|--------------|
|  | <b>.0077</b> | <b>.0036</b> | <b>.0058</b> | <b>.0018</b> | <b>.1580</b> | <b>538.6</b> |  | <b>194.7</b> | <b>18.8782</b> | <b>0</b> | <b>1.278</b> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--------------|----------------|----------|--------------|

Phase: 1B

|       |       |       |       |       |       |       |  |       |         |   |
|-------|-------|-------|-------|-------|-------|-------|--|-------|---------|---|
| IDLE  | .0003 | .0001 | .0004 | .0000 | .0007 | 8.7   |  | 8.6   | .3500   | 0 |
| ACCEL | .0035 | .0015 | .0030 | .0003 | .1310 | 315.1 |  | 81.6  | 6.8018  | 0 |
| DECEL | .0026 | .0013 | .0017 | .0002 | .1106 | 145.0 |  | 56.5  | 19.9515 | 0 |
| TOTAL | .0065 | .0029 | .0051 | .0005 | .2423 | 468.8 |  | 146.7 |         | 0 |

Phase: 1B Equivalent Mass Results: (Grams/Mile)

|  |              |              |              |              |              |              |  |              |                |          |             |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--------------|----------------|----------|-------------|
|  | <b>.0130</b> | <b>.0058</b> | <b>.0104</b> | <b>.0011</b> | <b>.4893</b> | <b>946.8</b> |  | <b>146.7</b> | <b>10.7449</b> | <b>0</b> | <b>.495</b> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--------------|----------------|----------|-------------|

Total Equivalent Mass Results: (Grams/Mile)

|  |              |              |              |              |              |              |              |              |              |                |          |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------|--------------|
|  | <b>.0056</b> | <b>.0028</b> | <b>.0040</b> | <b>.0010</b> | <b>.0969</b> | <b>441.0</b> | <b>.1031</b> | <b>.0114</b> | <b>909.0</b> | <b>23.0734</b> | <b>0</b> | <b>8.000</b> |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------|--------------|

CVS Mass Results: (Grams/Mile)

|          | HC     | CO     | NOX    | NMHC   | CO2     | CH4    | NMHC+NOX | NMOG+NOX | HFID    | Vol.MPG |
|----------|--------|--------|--------|--------|---------|--------|----------|----------|---------|---------|
| Phase: 1 | .00359 | .00000 | .29821 | .00061 | 678.220 | .00184 | .2988    | .29882   | 0.00233 | 15.0084 |
| Phase: 2 | .00074 | .00000 | .06600 | .00064 | 387.930 | .00141 | .0666    | .06664   | 0.00196 | 26.2259 |

CVS Total Mass Results: (Grams/Mile)

|  |               |               |               |               |                |               |              |               |               |                |
|--|---------------|---------------|---------------|---------------|----------------|---------------|--------------|---------------|---------------|----------------|
|  | <b>.00137</b> | <b>.00000</b> | <b>.11747</b> | <b>.00063</b> | <b>452.273</b> | <b>.00150</b> | <b>.1181</b> | <b>.11810</b> | <b>.00204</b> | <b>22.5126</b> |
|--|---------------|---------------|---------------|---------------|----------------|---------------|--------------|---------------|---------------|----------------|

Drive Metrics:

| CSI     | RMS  |
|---------|------|
| -19.016 | .335 |

SAE Drive Metrics:

|               | CED (J)           | CET (J)           | ER            | DistD (M)       | DistT (M)       | DistR         | EER           | ASCR          | IWR           | RMSSE (MPH)   |
|---------------|-------------------|-------------------|---------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|
| Phase: 1      | 4,575,720         | 4,604,910         | -0.634        | 2,854.9         | 2,852.2         | 0.095         | -0.733        | -0.634        | -0.684        | 0.6055        |
| Phase: 2      | 10,718,400        | 10,948,300        | -2.099        | 10,022.6        | 10,036.0        | -0.133        | -2.008        | -10.096       | -13.352       | 0.3693        |
| <b>Final:</b> | <b>15,294,100</b> | <b>15,553,200</b> | <b>-1.666</b> | <b>12,877.5</b> | <b>12,888.2</b> | <b>-0.083</b> | <b>-1.609</b> | <b>-3.633</b> | <b>-6.852</b> | <b>0.4762</b> |

Test Validation: Valid: Invalid: Retest: Accept: NIC: system Date: 07/01/2020 13:07:39

Validator's Comments:

Test Options:

| Option             | Description |
|--------------------|-------------|
| DHFID Hangup value | .004        |
| Gain               | .650        |

## Test Options

## Emission Summary Report

|                                  |                |
|----------------------------------|----------------|
| Constant Grade                   | .000           |
| Diesel Regeneration Required     | 0              |
| Background Particles             | .000           |
| Background Particles for PN      | .000           |
| MINI DILUTER T/P DILUTION RATIO  | 10.260         |
| Tailpipe Methane Response Factor | 1.056          |
| Bag Methane Response Factor      | 1.081          |
| DHFID Methane Response Factor    | 1.113          |
| Soak Duration(Hrs)               | 23             |
| Threshold                        | 350            |
| CVS K Coeff                      | 539.114        |
| Charging Type                    | CS             |
| Trace Start Method               | Flying         |
| Pre Test Vehicle Temperature     | Hot            |
| Actual Driver                    | Human          |
| CVS Venturi Selection            | Medium         |
| DynoGrade Type                   | None           |
| Special Test Qualifications      | None           |
| OBD II Monitor                   | None Requested |
| Abort test on dead battery       | Y              |
| Abort Test on INCA Failure       | Y              |
| Augmented Braking                | Y              |
| Diesel Test                      | Y              |
| Hybrid Test                      | Y              |
| Inca Requirement                 | Y              |
| Mule Vehicle to Park             | Y              |
| Road (Var.) Speed Fan required   | Y              |
| Rolls Requirement                | Y              |
| SAE Calculations Required        | Y              |
| Wrap Cursor                      | Y              |
| Weighted Dilution factor         | 12.860         |

### Sequence Purpose

US06 – MY16 DS – Consent Decree Tailpipe

### Req Spcl Inst

Use 8 ft exhaust pipe and Extra cooling.

Connect DCAN Cable – Automatically setting ROLLS MODE!

### Shift Comments

D| Dual Exhaust

### Sampling Type List

None -- None -- DCVS , Diesel Tailpipe / Particulates – Single

### Test Request Purpose

Test Comments

Emission Summary Report

V6DS63822 – Consent Decree – Tailpipe Emissions

**The results in this report relate only to this specific test.**