# APPENDIX D

# SUMMARIES OF TASK 2 ALDEHYDE/KETONE EMISSIONS

## TABLE D-1. SUMMARY OF TOYOTA CAMRY TASK 2 ALDEHYDE/KETONE EMISSION TEST RESULTS

| Date | Test No. | Fuel | Catalyst | Test Cycle | Form. (mg/ml) | Acet. (mg/ml) | Acrolein (mg/ml) | Acetone (mg/ml) | Propion. (mg/ml) | Croton. (mg\ml) | Isobutyr. & Mek (mg/ml) | Benz. (mg/ml) | Hexan. (mg/ml) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/13/90 | B2TTCU-01 | M85 | OEM | FTP | 17.5 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 3/13/90 | B2TTCU-01 | M85 | OEM | HFET | 4.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/13/90 | B2TTCU-01 | M85 | OEM | NYCC | 5.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2/28/90 | B2THCU-01 | M85 | Camet | FTP | 10.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 2/28/90 | B2THCU-01 | M85 | Camet | HFET | 1.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2/28/90 | B2THCU-01 | M85 | Camet | NYCC | 4.6 | 0.7 | 0.0 | 0.0 | 1.0 | 0.5 | 3.4 | 0.0 | 0.0 |
| 3/01/90 | B2THCU-02 | M85 | Camet | FTP | 8.5 | 0.6 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 3/01/90 | B2THCU-02 | M85 | Camet | HFET | 1.6 | 0.5 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3/01/90 | B2THCU-02 | M85 | Camet | NYCC | 3.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/16/90 | B2TDCC-01 | M85 | Degussa | FTP | 10.8 | 0.9 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 |
| 3/16/90 | B2TDCC-01 | M85 | Degussa | HFET | 3.8 | 1.6 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| 3/16/90 | B2TDCC-01 | M85 | Degussa | NYCC | 22.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/19/93 | B2TDCC-02 | M85 | Degussa | FTP | 9.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 3/19/93 | B2TDCC-02 | M85 | Degussa | HFET | 3.9 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/19/93 | B2TDCC-02 | M85 | Degussa | NYCC | 9.0 | 0.5 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.9 |
| 7/02/90 | B2TJM2-01 | M85 | JM | FTP | 16.3 | 0.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.2 | 0.0 |
| 7/02/90 | B2TJM2-01 | M85 | JM | HFET | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/02/90 | B2TJM2-01 | M85 | JM | NYC | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/03/90 | B2TJM2-02 | M85 | JM | FTP | 20.5 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 |
| 7/03/90 | B2TJM2-02 | M85 | JM | HFET | 1.1 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/03/90 | B2TJM2-02 | M85 | JM | NYCC | 3.4 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TABLE D-2. SUMMARY OF CHEVROLET CORSICA TASK 2 ALDEHYDE/KETONE EMISSION TEST RESULTS

| Date | Test No. | Fuel | Catalyst | Test Cycle | Form. (mg/ml) | Acet. (mg/ml) | Acrolein (mg/ml) | Acetone (mg/ml) | Propion. (mg/ml) | Croton. (mg\ml) | Isobutyr. & Mek (mg/ml) | Benz. (mg/ml) | Hexan. (mg/ml) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/02/90 | B2CHCU-01 | M85 | Camet | FTP | 4.8 | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| 3/02/90 | B2CHCU-01 | M85 | Camet | HFET | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/02/90 | B2CHCU-01 | M85 | Camet | HYCC | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/05/90 | B2CHCU-02 | M85 | Camet | FTP | 10.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 3/05/90 | B2CHCU-02 | M85 | Camet | HFET | 0.9 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| 3/05/90 | B1CHCU-02 | M85 | Camet | NYCC | 3.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/26/90 | B2CDCC-01 | M85 | Degussa | FTP | 6.9 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| 3/26/90 | B2CDCC-01 | M85 | Degussa | HFET | 1.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/26/90 | B2CDCC-01 | M85 | Degussa | NYCC | 9.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/27/90 | B2CDCC-02 | M85 | Degussa | FTP | 6.8 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| 3/27/90 | B2CDCC-02 | M85 | Degussa | HFET | 0.5 | 0.3 | 0.0 | 0.0 | 0.0 | 00 | 0.0 | 0.0 | 0.0 |
| 3.27/90 | B2CDCC-02 | M85 | Degussa | HYCC | 3.2 | 1.2 | 0.5 | 0.0 | 0.8 | 0.5 | 1.1 | 0.0 | 0.0 |
| 5/29/90 | B2CJM4-01 | M85 | JM | FTP | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| 5/29/90 | B2CJM4-01 | M85 | JM | HFET | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| 5/29/90 | B2CJM4-01 | M85 | JM | NYCC | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 |
| 5/30/90 | B2CJM4-02 | M85 | JM | FTP | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 5/30/90 | B2CJM4-02 | M85 | JM | HFET | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/30/90 | B2CJM4-02 | M85 | JM | NYCC | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 3/06/90 | B1CHCU-01 | Howell EEE | Camet | FTP | 1.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/06/90 | B1CHCU-01 | Howell EEE | Camet | HFET | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/06/90 | B1CHCU-01 | Howell EEE | Camet | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/07/90 | B1CHCU-02 | Howell EEE | Camet | FTP | 1.8 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 |
| 3/07/90 | B1CHCU-02 | Howell EEE | Camet | HFET | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/07/90 | B1CHCU-02 | Howell EEE | Camet | HYCC | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.5 | 2.1 | 0.0 | 0.7 |
| 3/22/90 | B1CDCC-01 | Howell EEE | Degussa | FTP | 3.1 | 5.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 |
| 3/22/90 | B1CDCC-01 | Howell EEE | Degussa | HFET | 1.0 | 3.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| 3/22/90 | B1CDCC-01 | Howell EEE | Degussa | NYCC | 2.5 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/23/90 | B1CDCC-02 | Howell EEE | Degussa | FTP | 3.6 | 0.8 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| 3/23/90 | B1CDCC-02 | Howell EEE | Degussa | HFET | 0.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3/23/90 | B1CDCC-02 | Howell EEE | Degussa | NYCC | 10.4 | 1.0 | 0.5 | 0.0 | 0.5 | 0.5 | 1.4 | 0.0 | 1.0 |
| 5/31/90 | B1CJM4-01 | Howell EEE | JM | FTP | 2.5 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 5/31/90 | B1CJM4-01 | Howell EEE | JM | HFET | 1.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 5/31/90 | B1CJM4-01 | Howell EEE | JM | NYCC | 6.2 | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/01/90 | B1CJM4-02 | Howell EEE | JM | FTP | 2.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 |
| 6/01/90 | B1CJM4-02 | Howell EEE | JM | HFET | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/01/90 | B1CJM4-02 | Howell EEE | JM | NYCC | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TABLE D-3. SUMMARY OF CROWN VICTORIA #1 ALDEHYDE/KETONE EMISSION TEST RESULTS

| Date | Test No. | Fuel | Catalyst | Test Cycle | FORM. (mg/ml) | ACET. (mg/ml) | ACROLEIN (mg/ml) | ACETONE (mg/ml) | PROPION. (mg/ml) | CROTON. (mg\ml) | ISOBUTYR. & MEK (mg/ml) | BENZ. (mg/ml) | HEXAN. (mg/ml) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/08/91 | B2FBL1-01 | M85 | OEM | FTP | 9.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 1/08/91 | B2FBL1-01 | M85 | OEM | HFET | 2.4 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/08/91 | B2FBL1-01 | M85 | OEM | HYCC | 8.1 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/26/90 | B2FJM1-02 | M85 | JM | FTP | 3.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/26/90 | B2FJM1-02 | M85 | JM | HFET | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/26/90 | B2FJM1-02 | M85 | JM | NYCC | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/03/91 | B2FJM1-03 | M85 | JM | FTP | 3.3 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/03/91 | B2FJM1-03 | M85 | JM | HFET | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/03/91 | B2FJM1-03 | M85 | JM | NYCC | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/23/91 | B2FD-01 | M85 | Degussa | FTP | 0.5 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/23/91 | B2FD-01 | M85 | Degussa | HFET | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/23/91 | B2FD-02 | M85 | Degussa | NYCC | 0.4 | 0.9 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/24/91 | B2FD-02 | M85 | Degussa | FTP | 0.8 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/24/91 | B2FD-02 | M85 | Degussa | HFET | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/24/91 | B2FD-02 | M85 | Degussa | HYCC | 0.2 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/02/91 | B2FHC-01 | M85 | Camet | FTP | 1.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/02/91 | B2FHC-01 | M85 | Camet | HFET | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/02/91 | B2FHC-01 | M85 | Camet | NYCC | 1.9 | 0.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/03/91 | B2FHC-02 | M85 | Camet | FTP | 1.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/03/91 | B2FHC-02 | M85 | Camet | HFET | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/03/91 | B2FHC-02 | M85 | Camet | NYCC | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/09/91 | B1FBL1-0 | Howell EEE | OEM | FTP | 2.2 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 |
| 1/09/91 | B1FBL1-0 | Howell EEE | OEM | HFET | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/09/91 | B1FBL1-0 | Howell EEE | OEM | NYCC | 1.7 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/27/90 | B1FJM1-0 | Howell EEE | JM | FTP | 0.8 | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/27/90 | B1FJM1-0 | Howell EEE | JM | HFET | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/27/90 | B1FJM1-0 | Howell EEE | JM | HYCC | 0.7 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/02/91 | B1FJM1-03 | Howell EEE | JM | FTP | 1.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/02/91 | B1FJM1-03 | Howell EEE | JM | HFET | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/02/91 | B1FJM1-03 | Howell EEE | JM | NYCC | 3.1 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/21/91 | B1FD-01 | Howell EEE | Degussa | FTP | 0.1 | 0.5 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/21/91 | B1FD-01 | Howell EEE | Degussa | HFET | 0.3 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/21/91 | B1FD-01 | Howell EEE | Degussa | NYCC | 1.0 | 0.4 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/22/91 | B1FD-02 | Howell EEE | Degussa | FTP | 0.1 | 0.7 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| 1/22/91 | B1FD-02 | Howell EEE | Degussa | HFET | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1/22/91 | B1FD-02 | Howell EEE | Degussa | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/06/91 | B1FHC-01 | Howell EEE | Camet | FTP | 1.5 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/06/91 | B1FHC-01 | Howell EEE | Camet | HFET | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/06/91 | B1FHC-01 | Howell EEE | Camet | NYCC | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/07/91 | B1FHC-02 | Howell EEE | Camet | FTP | 1.6 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/07/91 | B1FHC-02 | Howell EEE | Camet | HFET | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 5/07/91 | B1FHC-02 | Howell EEE | Camet | NYCC | 0.9 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## TABLE D-4. SUMMARY OF VW JETTA TASK 2 ALDEHYDE/KETONE EMISSION TEST RESULTS

| Date | Test No. | Fuel | Catalyst | Test Cycle | FORM. (mg/ml) | ACET. (mg/ml) | ACROLEIN (mg/ml) | ACETONE (mg/ml) | PROPION. (mg/ml) | CROTON. (mg\ml) | ISOBUTYR. & MEK (mg/ml) | BENZ. (mg/ml) | HEXAN. (mg/ml) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/19/90 | B2VBL-01 | M85 | OEM | FTP | 6.1 | 0.4 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 |
| 12/19/90 | B2VBL-01 | M85 | OEM | HFET | 1.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/19/90 | B2VBL-01 | M85 | OEM | NYCC | 9.3 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/09/91 | B2VJM-01 | M85 | JM | FTP | 2.4 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| 5/09/91 | B2VJM-01 | M85 | JM | HFET | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 5/09/91 | B2VJM-01 | M85 | JM | NYCC | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 |
| 5/10/91 | B2VJM-02 | M85 | JM | FTP | 2.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| 5/10/91 | B2VJM-02 | M85 | JM | HFET | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 5/10/91 | B2VJM-02 | M85 | JM | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 |
| 7/23/91 | B2VDC-01 | M85 | Degussa | FTP | 2.5 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 7/23/91 | B2VDC-01 | M85 | Degussa | HFET | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/23/91 | B2VDC-01 | M85 | Degussa | NYCC | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/24/91 | B2VDC-02 | M85 | Degussa | FTP | 2.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| 7/24/91 | B2VDC-02 | M85 | Degussa | HFET | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/24/91 | B2VDC-02 | M85 | Degussa | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/30/91 | B2VHC-01A | M85 | Camet | FTP | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/30/91 | B2VHC-01A | M85 | Camet | HFET | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/30/91 | B2VHC-01A | M85 | Camet | NYCC | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/01/91 | B2VHC-01A | M85 | Camet | FTP | 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/01/91 | B2VHC-01A | M85 | Camet | HFET | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/01/91 | B2VHC-01A | M85 | Camet | NYCC | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/18/90 | B1VBL-01 | Howell EEE | OEM | FTP | 1.8 | 0.9 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 |
| 12/18/90 | B1VBL-01 | Howell EEE | OEM | HFET | 0.8 | 0.5 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12/18/90 | B1VBL-01 | Howell EEE | OME | NYCC | 8.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/13/91 | B1VJM-01 | Howell EEE | JM | FTP | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| 5/13/91 | B1VJM-01 | Howell EEE | JM | HFET | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/13/91 | B1VJM-01 | Howell EEE | JM | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/14/91 | B1VJM-02 | Howell EEE | JM | FTP | 0.5 | 0.2 | 0.0 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| 5/14/91 | B1VJM-02 | Howell EEE | JM | HFET | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 5/14/91 | B1VJM-02 | Howell EEE | JM | NYCC | 0.4 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/22/91 | B1VDC-01 | Howell EEE | Degussa | FTP | 0.2 | 0.3 | 0.0 | 0.02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/18/91 | B1VDC-01 | Howell EEE | Degussa | HFET | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/18/91 | B1VDC-01 | Howell EEE | Deguss | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/19/91 | B1VDC-02 | Howell EEE | Degussa | FTP | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 7/19/91 | B1VDC-02 | Howell EEE | Degussa | HFET | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7/19/91 | B1VDC-02 | Howell EEE | Degussa | NYCC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/02/91 | VHC-01A | Howell EEE | Camet | FTP | 0.0 | 0.03 | 0.0 | 0.09 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/02/91 | VHC-01A | Howell EEE | Camet | HFET | 0.0 | 0.13 | 0.0 | 0.04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/02/91 | VHC-01A | Howell EEE | Camet | NYCC | 0.0 | 0.49 | 0.0 | 0.0 | 0.0 | 0.0 | 0.36 | 0.0 | 0.0 |
| 10/03/91 | B1VHC-02A | Howell EEE | Camet | FTP | 0.0 | 0.10 | 0.0 | 0.14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/03/91 | B1VHC-02A | Howell EEE | Camet | HFET | 0.0 | 0.07 | 0.0 | 0.08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/03/91 | B1VHC-02A | Howell EEE | Camet | NYCC | 0.0 | 0.10 | 0.0 | 0.04 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## APPENDIX E

## COMPUTER PRINTOUTS OF REGULATED ENGINE-OUT FTP EXHAUST EMISSIONS

| Page E- | Test No. | Vehicle | Configuration | Fuel |
|---|---|---|---|---|
| 2 | B1CBL | Corsica | No Catalyst | Gasoline |
| 3 | B1CBL | Corsica | No Catalyst | M85 |

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1CBL RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO. 934
DATE 11/ 1/89
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-891-F
ODOMETER 2340. KM( 1454. MILES)

BAROMETER 742.95 MM HG(29.25 IN HG)
RELATIVE HUMIDITY 32. PCT

DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 6.2 GM/KG

NOX HUMIDITY CORRECTION FACTOR .87

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 716.3 (28.2) | 716.3 (28.2) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET P MM. H20(IN. H20) | 716.3 (28.2) | 716.3 (28.2) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) | 41.1 (106.0) | 42.2 (108.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40574. | 69579. | 40503. | 69529. |
| TOT FLOW STD. CU. METRES(SCF) | 76.4 ( 2696.) | 131.1 ( 4628.) | 76.1 ( 2686.) | 130.8 ( 4619.) |
| THC SAMPLE METER/RANGE/PPM | 23.0/ 3/ 231. | 14.0/ 3/ 141. | 16.8/ 3/ 169. | 12.6/ 3/ 127. |
| THC BCKGRD METER/RANGE/PPM | .9/ 3/ 9. | 1.0/ 3/ 10. | .9/ 3/ 9. | 1.2/ 3/ 12. |
| CO SAMPLE METER/RANGE/PPM | 62.4/ 1/ 561. | 65.4/ 14/ 304. | 89.2/ 14/ 441. | 71.4/ 14/ 337. |
| CO BCKGRD METER/RANGE/PPM | .7/ 1/ 5. | .7/ 14/ 3. | .5/ 14/ 2. | .3/ 14/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 57.2/ 1/1.0494 | 81.0/ 14/ .6772 | 93.4/ 14/ .9535 | 81.3/ 14/ .6828 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 13.1/ 14/ .0442 | 12.9/ 14/ .0434 | 12.8/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | 61.3/ 2/ 61.3 | 80.9/ 1/ 20.3 | 53.5/ 2/ 53.5 | 22.6/ 2/ 22.7 |
| NOX BCKGRD METER/RANGE/PPM | .0/ 2/ .0 | .5/ 1/ .1 | .1/ 2/ .1 | .1/ 2/ .1 |
| DILUTION FACTOR | 11.89 | 18.59 | 13.23 | 18.40 |
| THC CONCENTRATION PPM | 223. | 131. | 161. | 115. |
| CO CONCENTRATION PPM | 540. | 294. | 426. | 328. |
| CO2 CONCENTRATION PCT | 1.0057 | .6354 | .9134 | .6421 |
| NOX CONCENTRATION PPM | 61.3 | 20.1 | 53.4 | 22.6 |
| THC MASS GRAMS | 9.80 | 9.93 | 7.04 | 8.71 |
| CO MASS GRAMS | 47.98 | 44.86 | 37.73 | 50.00 |
| CO2 MASS GRAMS | 1406.0 | 1524.6 | 1271.9 | 1537.9 |
| NOX MASS GRAMS | 7.80 | 4.40 | 6.77 | 4.92 |
| THC GRAMS/MI | 2.74 | 2.57 | 1.97 | 2.26 |
| CO GRAMS/MI | 13.41 | 11.63 | 10.54 | 12.95 |
| CO2 GRAMS/MI | 393.1 | 395.2 | 355.4 | 398.2 |
| NOX GRAMS/MI | 2.18 | 1.14 | 1.89 | 1.27 |
| FUEL ECONOMY IN MPG | 20.97 21.00 | 21.03 | 23.44 22.01 | 20.83 |
| RUN TIME SECONDS | 586. | 868. | 585. | 868. |
| MEASURED DISTANCE MI | 3.58 7.44 | 3.86 | 3.58 7.44 | 3.86 |
| SCF, DRY | .980 .982 | .983 | .981 .982 | .983 |
| DFC, WET (DRY) | .935( .925) | | .938( .928) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 207.4/ .00 | | 206.9/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1CBL |
| BAROMETER | MM HG | 743.0 |
| HUMIDITY | G/KG | 6.2 |
| TEMPERATURE | DEG C | 24.4 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 383.8 | ( 384.7) |
| FUEL ECONOMY | MPG | 21.63 | ( 21.57) |
| HYDROCARBONS (THC) | G/MI | 2.44 | ( 2.35) |
| CARBON MONOXIDE | G/MI | 11.70 | ( 12.09) |
| OXIDES OF NITROGEN | G/MI | 1.56 | ( 1.60) |

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PROJECT 08-2346-001

TEST NO. B2CBL RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO. 934
DATE 11/ 2/89
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-954-F
ODOMETER 2398. KM( 1490. MILES)

BAROMETER 749.05 MM HG(29.49 IN HG)
RELATIVE HUMIDITY 24. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 4.7 GM/KG

NOX HUMIDITY CORRECTION FACTOR .84

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 718.8 (28.3) | 718.8 (28.3) | 718.8 (28.3) | 718.8 (28.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) | 41.1 (106.0) | 42.8 (109.0) | 43.9 (111.0) |
| BLOWER REVOLUTIONS | 40552. | 69564. | 40526. | 69570. |
| TOT FLOW STD. CU. METRES(SCF) | 76.9 ( 2715.) | 132.2 ( 4666.) | 76.8 ( 2710.) | 131.5 ( 4644.) |
| THC SAMPLE METER/RANGE/PPM | 11.4/ 3/ 115. | 61.9/ 2/ 62. | 76.4/ 2/ 77. | 62.0/ 2/ 62. |
| THC BCKGRD METER/RANGE/PPM | .9/ 3/ 9. | 10.2/ 2/ 10. | 11.8/ 2/ 12. | 11.9/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 56.0/ 1/ 489. | 59.1/ 14/ 270. | 83.7/ 14/ 408. | 61.1/ 14/ 280. |
| CO BCKGRD METER/RANGE/PPM | .0/ 1/ 0. | .0/ 14/ 0. | .2/ 14/ 1. | .1/ 14/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 93.2/ 14/ .9482 | 77.6/ 14/ .6169 | 89.1/ 14/ .8457 | 77.8/ 14/ .6203 |
| CO2 BCKGRD METER/RANGE/PCT | 12.3/ 14/ .0411 | 12.2/ 14/ .0407 | 12.1/ 14/ .0403 | 12.1/ 14/ .0403 |
| NOX SAMPLE METER/RANGE/PPM | 56.3/ 2/ 56.3 | 70.4/ 1/ 17.6 | 44.1/ 2/ 44.1 | 79.3/ 1/ 19.9 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 2/ .1 | .4/ 1/ .1 | .1/ 2/ .1 | .1/ 1/ .0 |
| DILUTION FACTOR | 11.95 | 18.53 | 13.48 | 18.40 |
| THC CONCENTRATION PPM | 107. | 52. | 66. | 51. |
| CO CONCENTRATION PPM | 473. | 263. | 395. | 273. |
| CO2 CONCENTRATION PCT | .9105 | .5784 | .8084 | .5822 |
| NOX CONCENTRATION PPM | 56.2 | 17.5 | 44.0 | 19.8 |
| THC MASS GRAMS | 9.11 | 7.70 | 5.60 | 7.44 |
| CO MASS GRAMS | 42.30 | 40.46 | 35.32 | 41.81 |
| CO2 MASS GRAMS | 1281.7 | 1399.5 | 1136.1 | 1401.7 |
| NOX MASS GRAMS | 6.90 | 3.70 | 5.40 | 4.17 |
| THC GRAMS/MI | 2.55 | 1.99 | 1.57 | 1.93 |
| CO GRAMS/MI | 11.84 | 10.46 | 9.89 | 10.87 |
| CO2 GRAMS/MI | 358.8 | 361.7 | 318.3 | 364.6 |
| NOX GRAMS/MI | 1.93 | .96 | 1.51 | 1.08 |
| FUEL ECONOMY IN MPG | 12.77 12.77 | 12.77 | 14.48 13.47 | 12.66 |
| RUN TIME SECONDS | 505. | 867. | 505. | 868. |
| MEASURED DISTANCE MI | 3.57 7.44 | 3.87 | 3.57 7.41 | 3.84 |
| SCF, DRY | .976 .980 | .982 | .978 .980 | .982 |
| DFC, WET (DRY) | .935( .928) | | .938( .931) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 209.0/ .00 | | 208.3/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | B2CBL | CARBON DIOXIDE | G/MI | 349.2 | ( 350.0) |
| BAROMETER | MM HG 749.0 | FUEL ECONOMY | MPG | 13.20 | ( 13.16) |
| HUMIDITY | G/KG 4.7 | HYDROCARBONS (THC) | G/MI | 1.99 | ( 1.97) |
| TEMPERATURE | DEG C 25.0 | CARBON MONOXIDE | G/MI | 10.59 | ( 10.71) |
| | | OXIDES OF NITROGEN | G/MI | 1.31 | ( 1.35) |

## APPENDIX F

## COMPUTER PRINTOUTS OF CHEVROLET CORSICA FTP EXHAUST EMISSIONS WITH OEM CATALYST ON M85 WITH NEW FUEL INJECTORS

| Page F- | Test No. | Vehicle | Configuration | Fuel |
|---|---|---|---|---|
| 2 | C | Corsica | OEM Catalyst | M85 |
| 3 | D | Corsica | OEM Catalyst | M85 |

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FTP - VEHICLE EMISSIONS RESULTS - NEW INJECTORS
PROJECT 08-2346-001

TEST NO. C RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 1/10/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-954-F
ODOMETER 2483. KM( 1543. MILES)

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 62. PCT
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 11.3 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.02

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 41.1 (106.0) | 42.8 (109.0) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 40612. | 69604. | 40572. | 69619. |
| TOT FLOW STD. CU. METRES(SCF) | 76.5 ( 2702.) | 131.7 ( 4649.) | 76.5 ( 2702.) | 131.3 ( 4636.) |
| THC SAMPLE METER/RANGE/PPM | 55.2/ 2/ 55. | 8.7/ 2/ 9. | 20.3/ 2/ 20. | 10.7/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | 9.3/ 2/ 9. | 9.3/ 2/ 9. | 12.6/ 2/ 12. | 12.3/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 71.4/ 13/ 171. | 3.5/ 12/ 3. | 56.5/ 13/ 133. | 1.6/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .3/ 13/ 1. | .6/ 12/ 1. | .0/ 13/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 54.8/ 1/1.0045 | 79.9/ 14/ .6571 | 91.3/ 14/ .8990 | 80.7/ 14/ .6716 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 13.4/ 14/ .0454 | 13.4/ 14/ .0454 | 13.3/ 14/ .0450 |
| NOX SAMPLE METER/RANGE/PPM | 52.9/ 1/ 13.3 | 9.4/ 1/ 2.4 | 17.8/ 1/ 4.6 | 8.5/ 1/ 2.2 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 1/ .1 | .1/ 1/ .0 | .2/ 1/ .1 | .3/ 1/ .1 |
| DILUTION FACTOR | 11.73 | 18.28 | 13.17 | 17.89 |
| THC CONCENTRATION PPM | 46. | 0. | 9. | 0. |
| CO CONCENTRATION PPM | 163. | 3. | 127. | 1. |
| CO2 CONCENTRATION PCT | .9609 | .6142 | .8571 | .6292 |
| NOX CONCENTRATION PPM | 13.2 | 2.4 | 4.5 | 2.1 |
| THC MASS GRAMS | 3.93 | .00 | .73 | .00 |
| CO MASS GRAMS | 14.50 | .41 | 11.34 | .22 |
| CO2 MASS GRAMS | 1346.3 | 1480.6 | 1200.7 | 1512.4 |
| NOX MASS GRAMS | 1.97 | .62 | .67 | .55 |
| THC GRAMS/MI | 1.09 | .00 | .20 | .00 |
| CO GRAMS/MI | 4.03 | .11 | 3.14 | .06 |
| CO2 GRAMS/MI | 374.0 | 381.3 | 332.9 | 388.7 |
| NOX GRAMS/MI | .55 | .16 | .19 | .14 |
| FUEL ECONOMY IN MPG | 12.75 12.76 | 12.77 | 14.41 13.37 | 12.53 |
| RUN TIME SECONDS | 505. | 867. | 505. | 868. |
| MEASURED DISTANCE MI | 3.60 7.48 | 3.88 | 3.61 7.50 | 3.89 |
| SCF. DRY | .963 .967 | .969 | .965 .967 | .969 |
| DFC. WET (DRY) | .934( .915) | | .937( .918) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 208.2/ .00 | | 207.8/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | C |
| BAROMETER | MM HG | 746.5 |
| HUMIDITY | G/KG | 11.3 |
| TEMPERATURE | DEG C | 23.3 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 366.5 | ( 368.7) |
| FUEL ECONOMY | MPG | 13.18 | ( 13.10) |
| HYDROCARBONS (THC) | G/MI | .28 | ( .28) |
| CARBON MONOXIDE | G/MI | 1.75 | ( 1.74) |
| OXIDES OF NITROGEN | G/MI | .25 | ( .24) |

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PROJECT 08-2346-001

TEST NO. D1 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 1/11/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-954-F
ODOMETER 2506. KM( 1557. MILES)

BAROMETER 743.20 MM HG(29.26 IN HG)
RELATIVE HUMIDITY 51. PCT
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 9.3 GM/KG

NOX HUMIDITY CORRECTION FACTOR .96

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) | 723.9 (28.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 723.9 (28.5) | 718.8 (28.3) | 716.3 (28.2) | 718.8 (28.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 42.2 (108.0) | 42.8 (109.0) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 40601. | 69625. | 40524. | 69533. |
| TOT FLOW STD. CU. METRES(SCF) | 76.2 ( 2691.) | 130.9 ( 4621.) | 76.1 ( 2688.) | 130.7 ( 4615.) |
| THC SAMPLE METER/RANGE/PPM | 59.0/ 2/ 58. | 9.7/ 2/ 10. | 13.6/ 2/ 13. | 10.6/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 9.5/ 2/ 9. | 9.9/ 2/ 10. | 9.5/ 2/ 9. | 10.9/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 63.3/ 13/ 150. | 3.0/ 12/ 3. | 97.4/ 12/ 98. | 4.7/ 12/ 4. |
| CO BCKGRD METER/RANGE/PPM | .0/ 13/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .5/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 55.2/ 1/1.0120 | 80.4/ 14/ .6661 | 91.8/ 14/ .9116 | 80.8/ 14/ .6735 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0441 | 13.1/ 14/ .0442 | 13.2/ 14/ .0446 | 13.3/ 14/ .0450 |
| NOX SAMPLE METER/RANGE/PPM | 48.7/ 1/ 12.2 | 9.6/ 1/ 2.5 | 23.6/ 1/ 6.0 | 8.5/ 1/ 2.2 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 1/ .0 | .0/ 1/ .0 | .0/ 1/ .0 | .0/ 1/ .0 |
| DILUTION FACTOR | 11.66 | 18.03 | 13.05 | 17.83 |
| THC CONCENTRATION PPM | 50. | 0. | 5. | 0. |
| CO CONCENTRATION PPM | 144. | 3. | 94. | 4. |
| CO2 CONCENTRATION PCT | .9717 | .6244 | .8705 | .6310 |
| NOX CONCENTRATION PPM | 12.2 | 2.5 | 6.0 | 2.2 |
| THC MASS GRAMS | 4.22 | .05 | .40 | .04 |
| CO MASS GRAMS | 12.76 | .42 | 8.35 | .59 |
| CO2 MASS GRAMS | 1355.6 | 1496.1 | 1213.0 | 1509.8 |
| NOX MASS GRAMS | 1.70 | .60 | .83 | .53 |
| THC GRAMS/MI | 1.18 | .01 | .11 | .01 |
| CO GRAMS/MI | 3.56 | .11 | 2.32 | .15 |
| CO2 GRAMS/MI | 377.7 | 385.1 | 336.8 | 389.3 |
| NOX GRAMS/MI | .47 | .15 | .23 | .14 |
| FUEL ECONOMY IN MPG | 12.65 12.64 | 12.64 | 14.30 13.31 | 12.50 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.59 7.47 | 3.89 | 3.60 7.48 | 3.88 |
| SCF. DRY | .967 .970 | .972 | .968 .971 | .972 |
| DFC. WET (DRY) | .933( .918) | | .936( .921) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 207.1/ .00 | | 206.8/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | D1 |
| BAROMETER | MM HG | 743.2 |
| HUMIDITY | G/KG | 9.3 |
| TEMPERATURE | DEG C | 23.3 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 370.3 | ( 371.6) |
| FUEL ECONOMY | MPG | 13.06 | ( 13.02) |
| HYDROCARBONS (THC) | G/MI | .28 | ( .28) |
| CARBON MONOXIDE | G/MI | 1.43 | ( 1.44) |
| OXIDES OF NITROGEN | G/MI | .24 | ( .24) |

## APPENDIX G

## COMPUTER PRINTOUTS OF TASK 2 CHEVROLET CORSICA CATALYST EVALUATION EMISSION TEST RESULTS

| Page G- | Test No. | Fuel | Catalyst | Test Cycle |
|---|---|---|---|---|
| 2 | B2CHCU-01 | M85 | Camet | FTP |
| 3 | B2CHCU-01 | M85 | Camet | HFET |
| 4 | B2CHCU-01 | M85 | Camet | NYCC |
| 5 | B2CHCU-02 | M85 | Camet | FTP |
| 6 | B2CHCU-02 | M85 | Camet | HFET |
| 7 | B2CHCU-02 | M85 | Camet | NYCC |
| 8 | B2CDCC-01 | M85 | Degussa | FTP |
| 9 | B2CDCC-01 | M85 | Degussa | HFET |
| 10 | B2CDCC-01 | M85 | Degussa | NYCC |
| 11 | B2CDCC-02 | M85 | Degussa | FTP |
| 12 | B2CDCC-02 | M85 | Degussa | HFET |
| 13 | B2CDCC-02 | M85 | Degussa | NYCC |
| 14 | B2CJM4-01 | M85 | JM | FTP |
| 15 | B2CJM4-01 | M85 | JM | HFET |
| 16 | B2CJM4-01 | M85 | JM | NYCC |
| 17 | B2CJM4-02 | M85 | JM | FTP |
| 18 | B2CJM4-02 | M85 | JM | HFET |
| 19 | B2CJM4-02 | M85 | JM | NYCC |
| 20 | B1CHCU-01 | Howell EEE | Camet | FTP |
| 21 | B1CHCU-01 | Howell EEE | Camet | HFET |
| 22 | B1CHCU-01 | Howell EEE | Camet | NYCC |
| 23 | B1CHCU-02 | Howell EEE | Camet | FTP |
| 24 | B1CHCU-02 | Howell EEE | Camet | HFET |
| 25 | C1CHCH-02 | Howell EEE | Camet | NYCC |
| 26 | B1CDCC-01 | Howell EEE | Degussa | FTP |
| 27 | B1CDCC-01 | Howell EEE | Degussa | HFET |
| 28 | B1CDCC-01 | Howell EEE | Degussa | NYCC |
| 29 | B1CDCC-02 | Howell EEE | Degussa | FTP |
| 30 | B1CDCC-02 | Howell EEE | Degussa | HFET |
| 31 | B1CDCC-02 | Howell EEE | Degussa | NYCC |
| 32 | B1CJM4-01 | Howell EEE | JM | FTP |
| 33 | B1CJM4-01 | Howell EEE | JM | HFET |
| 34 | B1CJM4-01 | Howell EEE | JM | NYCC |
| 35 | B1CJM4-02 | Howell EEE | JM | FTP |
| 36 | B1CJM4-02 | Howell EEE | JM | HFET |
| 37 | B1CJM4-02 | Howell EEE | JM | NYCC |

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PROJECT 08-2346-001

ST NO. B2CHCU-01 RUN 1
HICLE MODEL 89 CORSICA
GINE 2.8 L(171. CID) V-6
ANSMISSION A3

VEHICLE NO.934
DATE 3/ 2/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2560. KM( 1591. MILES)

ROMETER 743.46 MM HG(29.27 IN HG)
LATIVE HUMIDITY 27. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 5.4 GM/KG

NOX HUMIDITY CORRECTION FACTOR .85

G RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 769.6 (30.3) | 769.6 (30.3) | 769.6 (30.3) |
| BLOWER INLET P MM. H2O(IN. H2O) | 759.5 (29.9) | 764.5 (30.1) | 764.5 (30.1) | 764.5 (30.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) | 42.8 (109.0) | 44.4 (112.0) | 43.3 (110.0) |
| BLOWER REVOLUTIONS | 40474. | 69440. | 40436. | 69388. |
| TOT FLOW STD. CU. METRES(SCF) | 75.4 ( 2661.) | 129.6 ( 4575.) | 75.2 ( 2656.) | 129.3 ( 4567.) |
| THC SAMPLE METER/RANGE/PPM | 29.3/ 2/ 29. | 9.2/ 2/ 9. | 13.1/ 2/ 13. | 10.1/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 8.9/ 2/ 9. | 9.1/ 2/ 9. | 9.9/ 2/ 10. | 10.7/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 72.6/ 13/ 175. | 5.1/ 12/ 5. | 43.1/ 13/ 100. | 3.4/ 12/ 3. |
| CO BCKGRD METER/RANGE/PPM | 2.1/ 13/ 5. | 3.5/ 12/ 3. | 1.1/ 13/ 3. | 2.0/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 95.1/ 14/1.0006 | 79.9/ 14/ .6571 | 91.0/ 14/ .8915 | 80.1/ 14/ .6607 |
| CO2 BCKGRD METER/RANGE/PCT | 12.9/ 14/ .0434 | 12.9/ 14/ .0434 | 13.4/ 14/ .0454 | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | 14.8/ 1/ 3.8 | 8.8/ 1/ 2.3 | 18.8/ 1/ 4.8 | 6.4/ 1/ 1.7 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 | .2/ 1/ .1 | .3/ 1/ .1 | .3/ 1/ .1 |
| DILUTION FACTOR | 11.79 | 18.28 | 13.33 | 18.18 |
| THC CONCENTRATION PPM | 21. | 1. | 4. | 0. |
| CO CONCENTRATION PPM | 164. | 2. | 95. | 1. |
| CO2 CONCENTRATION PCT | .9608 | .6160 | .8495 | .6178 |
| NOX CONCENTRATION PPM | 3.7 | 2.2 | 4.7 | 1.6 |
| THC MASS GRAMS | 1.75 | .09 | .33 | .00 |
| CO MASS GRAMS | 14.43 | .24 | 8.28 | .21 |
| CO2 MASS GRAMS | 1325.7 | 1461.3 | 1170.1 | 1462.9 |
| NOX MASS GRAMS | .45 | .47 | .58 | .34 |
| THC GRAMS/MI | .49 | .02 | .09 | .00 |
| CO GRAMS/MI | 4.05 | .06 | 2.32 | .05 |
| CO2 GRAMS/MI | 372.4 | 379.4 | 328.3 | 384.3 |
| NOX GRAMS/MI | .13 | .12 | .16 | .09 |
| FUEL ECONOMY IN MPG | 12.99 12.99 | 12.99 | 14.85 13.73 | 12.83 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.56 7.41 | 3.85 | 3.56 7.37 | 3.81 |
| SCF, DRY | .974 .978 | .980 | .976 .979 | .980 |
| DFC, WET (DRY) | .934( .926) | | .938( .930) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 204.9/ .00 | | 204.6/ .00 | |

MPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B2CHCU-01 |
| BAROMETER | MM HG | 743.5 |
| HUMIDITY | G/KG | 5.4 |
| TEMPERATURE | DEG C | 25.0 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 363.9 | ( 365.3) |
| FUEL ECONOMY | MPG | 13.45 | ( 13.40) |
| HYDROCARBONS (THC) | G/MI | .14 | ( .13) |
| CARBON MONOXIDE | G/MI | 1.51 | ( 1.51) |
| OXIDES OF NITROGEN | G/MI | .13 | ( .12) |

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PROJECT 08-2346-001

ST NO. B2CHCU-01 RUN 1
HICLE MODEL 89 CORSICA
GINE 2.8 L(171. CID) V-6
NSMISSION A3

ROMETER 741.68 MM HG(29.20 IN HG)
LATIVE HUMIDITY 28. PCT
G RESULTS

VEHICLE NO.934
DATE 3/ 2/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)
ABS. HUMIDITY 5.8 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2593. KM( 1605. MILES)

NOX HUMIDITY CORRECTION FACTOR .86

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 772.2 (30.4) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 769.6 (30.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 44.4 (112.0) |
| BLOWER REVOLUTIONS | | 61233. |
| TOT FLOW STD. CU. METRES(SCF) | | 113.5 ( 4009.) |
| THC SAMPLE METER/RANGE/PPM | | 10.2/ 3/ 10. |
| THC BCKGRD METER/RANGE/PPM | | 8.8/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | | 39.7/ 12/ 39. |
| CO BCKGRD METER/RANGE/PPM | | 1.2/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 66.9/ 1/1.2311 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.4/ 1/ .0423 |
| NOX SAMPLE METER/RANGE/PPM | | 8.0/ 1/ 2.1 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 1/ .0 |
| DILUTION FACTOR | | 9.74 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 36. |
| CO2 CONCENTRATION PCT | | 1.1931 |
| NOX CONCENTRATION PPM | | 2.1 |
| THC MASS GRAMS | | .29 |
| CO MASS GRAMS | | 4.80 |
| CO2 MASS GRAMS | | 2480.2 |
| NOX MASS GRAMS | | .38 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .897 ( .889) |
| SCF, WET (DRY) | | 1.000 ( .970) |
| VOL (SCM) | | 113.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.14 |
| TEST NUMBER, | | B2CHCU-01 |
| BAROMETER, | MM HG | 741.7 |
| HUMIDITY, | G/KG | 5.9 |
| TEMPERATURE, | DEG C | 25.6 |
| CARBON DIOXIDE, | G/MI | 244.7 |
| FUEL ECONOMY, | MPG | 20.1 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .47 |
| OXIDES OF NITROGEN. | G/MI | .04 |

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PROJECT 08-2346-001

| | | |
|---|---|---|
| NO. B2CHCU-01 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| CLE MODEL 89 CORSICA | DATE 3/ 2/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| NE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-998-F |
| SMISSION A3 | DYNO NO. 3 | ODOMETER 2599. KM( 1615. MILES) |
| | CVS NO. 2 | |
| METER 740.92 MM HG(29.17 IN HG) | DRY BULB TEMP. 26.1 DEG C(79.0 DEG F) | |
| TIVE HUMIDITY 26. PCT | ABS. HUMIDITY 5.6 GM/KG | NOX HUMIDITY CORRECTION FACTOR .86 |

RESULTS

| EST CYCLE | NYCC |
|---|---|
| LOWER DIF P MM. H2O(IN. H2O) | 759.5 (29.9) |
| LOWER INLET P MM. H2O(IN. H2O) | 756.9 (29.8) |
| LOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) |
| LOWER REVOLUTIONS | 47867. |
| OT FLOW STD. CU. METRES(SCF) | 88.8 ( 3136.) |
| HC SAMPLE METER/RANGE/PPM | 9.4/ 2/ 9. |
| HC BCKGRD METER/RANGE/PPM | 8.3/ 2/ 8. |
| O SAMPLE METER/RANGE/PPM | 13.6/ 12/ 13. |
| O BCKGRD METER/RANGE/PPM | .4/ 12/ 0. |
| O2 SAMPLE METER/RANGE/PCT | 72.0/ 14/ .5283 |
| O2 BCKGRD METER/RANGE/PCT | 12.0/ 14/ .0399 |
| OX SAMPLE METER/RANGE/PPM | 5.7/ 1/ 1.5 |
| OX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 |
| ILUTION FACTOR | 22.68 |
| HC CONCENTRATION PPM | 1. |
| O CONCENTRATION PPM | 12. |
| O2 CONCENTRATION PCT | .4902 |
| OX CONCENTRATION PPM | 1.4 |
| HC MASS GRAMS | .14 |
| O MASS GRAMS | 1.29 |
| O2 MASS GRAMS | 797.1 |
| OX MASS GRAMS | .21 |
| RUN TIME SECONDS | 598. |
| DFC, WET (DRY) | .956 ( .948) |
| SCF, WET (DRY) | 1.000 ( .983) |
| VOL (SCM) | 88.8 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.14 |

| | | |
|---|---|---|
| TEST NUMBER, | | B2CHCU-01 |
| BAROMETER, | MM HG | 740.9 |
| HUMIDITY, | G/KG | 5.6 |
| TEMPERATURE, | DEG C | 26.1 |
| CARBON DIOXIDE, | G/MI | 698.3 |
| FUEL ECONOMY, | MPG | 7.0 |
| HYDROCARBONS, (THC) | G/MI | .13 |
| CARBON MONOXIDE, | G/MI | 1.13 |
| OXIDES OF NITROGEN, | G/MI | .18 |

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PROJECT 08-2346-001

TEST NO. B2CHCU-02 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 3/ 5/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2614. KM( 1624. MILES)

BAROMETER 735.85 MM HG(29.01 IN HG)
RELATIVE HUMIDITY 49. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 10.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 759.5 (29.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 759.5 (29.9) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) | 43.9 (111.0) | 45.0 (113.0) | 44.4 (112.0) |
| BLOWER REVOLUTIONS | 40465. | 69450. | 40432. | 69418. |
| TOT FLOW STD. CU. METRES(SCF) | 74.6 ( 2633.) | 128.1 ( 4524.) | 74.6 ( 2633.) | 128.0 ( 4519.) |
| THC SAMPLE METER/RANGE/PPM | 39.9/ 2/ 39. | 11.7/ 2/ 12. | 13.3/ 2/ 13. | 12.0/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 11.4/ 2/ 11. | 12.6/ 2/ 12. | 11.1/ 2/ 11. | 12.5/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 68.7/ 13/ 164. | 4.2/ 12/ 4. | 62.0/ 12/ 61. | 2.4/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | 1.5/ 13/ 3. | 2.7/ 12/ 3. | 1.9/ 12/ 2. | 1.7/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 56.7/ 1/1.0400 | 80.7/ 14/ .6716 | 91.9/ 14/ .9142 | 80.7/ 14/ .5716 |
| CO2 BCKGRD METER/RANGE/PCT | 2.8/ 1/ .0494 | 13.5/ 14/ .0458 | 13.6/ 14/ .0462 | 13.8/ 14/ .0470 |
| NOX SAMPLE METER/RANGE/PPM | 26.2/ 1/ 6.6 | 6.0/ 1/ 1.6 | 11.6/ 1/ 3.0 | 6.8/ 1/ 1.8 |
| NOX BCKGRD METER/RANGE/PPM | 1.0/ 1/ .3 | .0/ 1/ .0 | .6/ 1/ .2 | .4/ 1/ .1 |
| DILUTION FACTOR | 11.36 | 17.88 | 13.06 | 17.88 |
| THC CONCENTRATION PPM | 29. | 0. | 3. | 0. |
| CO CONCENTRATION PPM | 154. | 1. | 57. | 1. |
| CO2 CONCENTRATION PCT | .9950 | .6284 | .8716 | .6273 |
| NOX CONCENTRATION PPM | 6.4 | 1.6 | 2.9 | 1.7 |
| THC MASS GRAMS | 2.42 | .00 | .25 | .03 |
| CO MASS GRAMS | 13.38 | .22 | 4.97 | .11 |
| CO2 MASS GRAMS | 1358.6 | 1474.0 | 1189.9 | 1469.8 |
| NOX MASS GRAMS | .89 | .38 | .40 | .40 |
| THC GRAMS/MI | .68 | .00 | .07 | .01 |
| CO GRAMS/MI | 3.75 | .06 | 1.39 | .03 |
| CO2 GRAMS/MI | 381.1 | 383.9 | 333.8 | 381.5 |
| NOX GRAMS/MI | .25 | .10 | .11 | .10 |
| FUEL ECONOMY IN MPG | 12.71 12.78 | 12.84 | 14.67 13.71 | 12.92 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.57 7.41 | 3.84 | 3.56 7.42 | 3.85 |
| SCF, DRY | .967 .970 | .973 | .969 .971 | .973 |
| DFC, WET (DRY) | .932( .917) | | .936( .922) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 202.7/ .00 | | 202.6/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B2CHCU-02 |
| BAROMETER | MM HG | 736.9 |
| HUMIDITY | G/KG | 10.1 |
| TEMPERATURE | DEG C | 25.0 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 369.6 | ( 368.9) |
| FUEL ECONOMY | MPG | 13.27 | ( 13.29) |
| HYDROCARBONS (THC) | G/MI | .16 | ( .16) |
| CARBON MONOXIDE | G/MI | 1.19 | ( 1.18) |
| OXIDES OF NITROGEN | G/MI | .13 | ( .14) |

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PROJECT 08-2346-001

ST NO. B2CHCU-02 RUN 1
HICLE MODEL 89 CORSICA
GINE 2.8 L(171. CID) V-6
ANSMISSION A3

ROMETER 735.84 MM HG(28.97 IN HG)
LATIVE HUMIDITY 47. PCT
S RESULTS

VEHICLE NO.934
DATE 3/ 5/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)
ABS. HUMIDITY 9.8 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2636. KM( 1638. MILES)

NOX HUMIDITY CORRECTION FACTOR .97

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 774.7 (30.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 774.7 (30.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) |
| BLOWER REVOLUTIONS | 61241. |
| TOT FLOW STD. CU. METRES(SCF) | 112.5 ( 3972.) |
| THC SAMPLE METER/RANGE/PPM | 12.0/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 11.7/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 19.5/ 12/ 19. |
| CO BCKGRD METER/RANGE/PPM | 1.5/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 68.3/ 1/1.2575 |
| CO2 BCKGRD METER/RANGE/PCT | 2.8/ 1/ .0494 |
| NOX SAMPLE METER/RANGE/PPM | 10.6/ 1/ 2.7 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 |
| DILUTION FACTOR | 9.55 |
| THC CONCENTRATION PPM | 2. |
| CO CONCENTRATION PPM | 17. |
| CO2 CONCENTRATION PCT | 1.2132 |
| NOX CONCENTRATION PPM | 2.6 |
| THC MASS GRAMS | .19 |
| CO MASS GRAMS | 2.19 |
| CO2 MASS GRAMS | 2498.5 |
| NOX MASS GRAMS | .55 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .895 ( .882) |
| SCF, WET (DRY) | 1.000 ( .964) |
| VOL (SCM) | 112.5 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.14 |
| TEST NUMBER, | B2CHCU-02 |
| BAROMETER, MM HG | 735.8 |
| HUMIDITY, G/KG | 9.8 |
| TEMPERATURE, DEG C | 25.6 |
| CARBON DIOXIDE, G/MI | 246.4 |
| FUEL ECONOMY, MPG | 20.0 |
| HYDROCARBONS, (THC) G/MI | .02 |
| CARBON MONOXIDE, G/MI | .22 |
| OXIDES OF NITROGEN, G/MI | .05 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

| | | |
|---|---|---|
| T NO. B2CHCU-02 RUN 1 | VEHICLE NO. 934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| ICLE MODEL 89 CORSICA | DATE 3/ 5/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| INE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-998-F |
| NSMISSION A3 | DYNO NO. 3 | ODOMETER 2652. KM( 1648. MILES) |
| | CVS NO. 2 | |
| OMETER 735.58 MM HG(28.96 IN HG) | DRY BULB TEMP. 25.0 DEG C(77.0 DEG F) | |
| ATIVE HUMIDITY 49. PCT | ABS. HUMIDITY 10.1 GM/KG | NOX HUMIDITY CORRECTION FACTOR .98 |

| RESULTS | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 749.3 (29.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 749.3 (29.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 49.4 (121.0) |
| BLOWER REVOLUTIONS | | 47887. |
| TOT FLOW STD. CU. METRES(SCF) | | 88.8 ( 3134.) |
| THC SAMPLE METER/RANGE/PPM | | 13.8/ 3/ 14. |
| THC BCKGRD METER/RANGE/PPM | | 12.1/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | | 39.3/ 12/ 39. |
| CO BCKGRD METER/RANGE/PPM | | 1.9/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 73.1/ 14/ .5448 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.6/ 14/ .0462 |
| NOX SAMPLE METER/RANGE/PPM | | 5.1/ 1/ 1.3 |
| NOX BCKGRD METER/RANGE/PPM | | .2/ 1/ .1 |
| DILUTION FACTOR | | 21.89 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 36. |
| CO2 CONCENTRATION PCT | | .5007 |
| NOX CONCENTRATION PPM | | 1.3 |
| THC MASS GRAMS | | .22 |
| CO MASS GRAMS | | 3.69 |
| CO2 MASS GRAMS | | 813.7 |
| NOX MASS GRAMS | | .21 |
| RUN TIME | SECONDS | 598. |
| DFC, WET (DRY) | | .954 ( .939) |
| SCF, WET (DRY) | | 1.000 ( .975) |
| VOL (SCM) | | 88.8 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.17 |
| TEST NUMBER, | | B2CHCU-02 |
| BAROMETER, | MM HG | 735.6 |
| HUMIDITY, | G/KG | 10.1 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 696.9 |
| FUEL ECONOMY, | MPG | 7.0 |
| HYDROCARBONS, (THC) | G/MI | .19 |
| CARBON MONOXIDE, | G/MI | 3.16 |
| OXIDES OF NITROGEN, | G/MI | .18 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. 92CDCC-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 3/26/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2873. KM( 1785. MILES)

BAROMETER 749.55 MM HG(29.51 IN HG)
RELATIVE HUMIDITY 35. PCT

DRY BULB TEMP. 24.4 DEG C(75.0 DEG F)
ABS. HUMIDITY 6.8 GM/KG

NOX HUMIDITY CORRECTION FACTOR .89

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 42.2 (108.0) | 42.2 (108.0) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 40445. | 69414. | 40541. | 69352. |
| TOT FLOW STD. CU. METRES(SCF) | 75.8 ( 2676.) | 130.2 ( 4596.) | 76.0 ( 2684.) | 130.1 ( 4592.) |
| THC SAMPLE METER/RANGE/PPM | 49.3/ 2/ 49. | 10.0/ 2/ 10. | 16.6/ 2/ 16. | 10.2/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 11.1/ 2/ 11. | 11.4/ 2/ 11. | 10.1/ 2/ 10. | 10.8/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 71.0/ 13/ 170. | .6/ 12/ 1. | 18.7/ 12/ 18. | .5/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .2/ 13/ 0. | .1/ 12/ 0. | .0/ 12/ 0. | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 94.7/ 14/ .9892 | 79.6/ 14/ .6517 | 90.9/ 14/ .8890 | 79.5/ 14/ .6499 |
| CO2 BCKGRD METER/RANGE/PCT | 13.5/ 14/ .0458 | 13.5/ 14/ .0462 | 13.4/ 14/ .0454 | 13.6/ 14/ .0462 |
| NOX SAMPLE METER/RANGE/PPM | 24.9/ 1/ 6.3 | 9.4/ 1/ 2.4 | 14.3/ 1/ 3.7 | 3.8/ 1/ 1.0 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 | .6/ 1/ .2 | .4/ 1/ .1 | .1/ 1/ .0 |
| DILUTION FACTOR | 11.91 | 18.44 | 13.48 | 18.49 |
| THC CONCENTRATION PPM | 39. | 0. | 7. | 0. |
| CO CONCENTRATION PPM | 163. | 0. | 17. | 0. |
| CO2 CONCENTRATION PCT | .9473 | .6080 | .8470 | .6062 |
| NOX CONCENTRATION PPM | 6.2 | 2.3 | 3.6 | 1.0 |
| THC MASS GRAMS | 3.26 | .00 | .61 | .00 |
| CO MASS GRAMS | 14.42 | .07 | 1.55 | .06 |
| CO2 MASS GRAMS | 1314.2 | 1449.1 | 1179.0 | 1443.5 |
| NOX MASS GRAMS | .79 | .50 | .46 | .21 |
| THC GRAMS/MI | .92 | .00 | .17 | .00 |
| CO GRAMS/MI | 4.04 | .02 | .43 | .01 |
| CO2 GRAMS/MI | 368.5 | 377.5 | 330.4 | 376.7 |
| NOX GRAMS/MI | .22 | .13 | .13 | .06 |
| FUEL ECONOMY IN MPG | 13.10 13.08 | 13.06 | 14.88 13.90 | 13.09 |
| RUN TIME SECONDS | 505. | 868. | 507. | 867. |
| MEASURED DISTANCE MI | 3.57 7.40 | 3.84 | 3.57 7.40 | 3.83 |
| SCF, DRY | .972 .976 | .978 | .974 .976 | .978 |
| DFD, WET (DRY) | .935( .924) | | .939( .928) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 205.9/ .00 | | 206.1/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | 92CDCC-01 | CARBON DIOXIDE | G/MI | 362.7 | ( 362.4) |
| BAROMETER | MM HG 749.5 | FUEL ECONOMY | MPG | 13.53 | ( 13.53) |
| HUMIDITY | G/KG 6.8 | HYDROCARBONS (THC) | G/MI | .24 | ( .24) |
| TEMPERATURE | DEG C 24.4 | CARBON MONOXIDE | G/MI | .97 | ( .97) |
| | | OXIDES OF NITROGEN | G/MI | .15 | ( .13) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2CDCC-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 748.79 MM HG(29.48 IN HG)
RELATIVE HUMIDITY 34. PCT

VEHICLE NO.934
DATE 3/26/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 6.4 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2897. KM( 1800. MILES)

NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.8 (109.0) |
| BLOWER REVOLUTIONS | | 61234. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.6 ( 4046.) |
| THC SAMPLE METER/RANGE/PPM | | 10.3/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | | 9.1/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | | 7.4/ 12/ 7. |
| CO BCKGRD METER/RANGE/PPM | | .2/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 67.4/ 1/1.2405 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.5/ 1/ .0441 |
| NOX SAMPLE METER/RANGE/PPM | | 12.0/ 1/ 3.1 |
| NOX BCKGRD METER/RANGE/PPM | | .0/ 1/ .0 |
| DILUTION FACTOR | | 9.69 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 7. |
| CO2 CONCENTRATION PCT | | 1.2010 |
| NOX CONCENTRATION PPM | | 3.1 |
| THC MASS GRAMS | | .26 |
| CO MASS GRAMS | | .88 |
| CO2 MASS GRAMS | | 2519.5 |
| NOX MASS GRAMS | | .59 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .897 ( .857) |
| SCF, WET (DRY) | | 1.000 ( .968) |
| VOL (SCM) | | 114.6 |
| BAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.15 |
| TEST NUMBER, | | B2CDCC-01 |
| BAROMETER, | MM HG | 748.8 |
| HUMIDITY, | G/KG | 6.4 |
| TEMPERATURE, | DEG C | 23.9 |
| CARBON DIOXIDE, | G/MI | 248.1 |
| FUEL ECONOMY, | MPG | 19.9 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .09 |
| OXIDES OF NITROGEN, | G/MI | .06 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2CDCC-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 3.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 748.79 MM HG(29.48 IN HG)
RELATIVE HUMIDITY 34. PCT

VEHICLE NO.934
DATE 3/25/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 6.4 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-996-F
ODOMETER 3913. KM( 1818. MILES)

NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.8 (109.0) |
| BLOWER REVOLUTIONS | | 47943. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.7 ( 3168.) |
| THC SAMPLE METER/RANGE/PPM | | 10.4/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | | 9.7/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | | 16.0/ 12/ 15. |
| CO BCKGRD METER/RANGE/PPM | | .6/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 71.6/ 14/ .5224 |
| CO2 BCKGRD METER/RANGE/PCT | | 14.1/ 14/ .0482 |
| NOX SAMPLE METER/RANGE/PPM | | .0/ 1/ .0 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 1/ .0 |
| DILUTION FACTOR | | 22.93 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 15. |
| CO2 CONCENTRATION PCT | | .4763 |
| NOX CONCENTRATION PPM | | -.0 |
| THC MASS GRAMS | | .11 |
| CO MASS GRAMS | | 1.52 |
| CO2 MASS GRAMS | | 782.4 |
| NOX MASS GRAMS | | -.00 |
| RUN TIME | SECONDS | 600. |
| DFC, WET (DRY) | | .956 ( .946) |
| DCF, WET (DRY) | | 1.000 ( .990) |
| VOL (SCM) | | 89.7 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.15 |

| | | |
|---|---|---|
| TEST NUMBER, | | B2CDCC-01 |
| BAROMETER, | MM HG | 748.8 |
| HUMIDITY, | G/KG | 6.4 |
| TEMPERATURE, | DEG C | 23.9 |
| CARBON DIOXIDE, | G/MI | 677.1 |
| FUEL ECONOMY, | MPG | 7.3 |
| HYDROCARBONS, (THC) | G/MI | .10 |
| CARBON MONOXIDE, | G/MI | 1.31 |
| OXIDES OF NITROGEN, | G/MI | -.00 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

T NO. 82CDCC-02 RUN 1
ICLE MODEL 89 CORSICA
INE 2.8 L(171. CID) V-6
NSMISSION A3

VEHICLE NO.934
DATE 3/27/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-998-F
ODOMETER 2915. KM( 1811. MILES)

OMETER 742.95 MM HG(29.25 IN HG)
LATIVE HUMIDITY 42. PCT

DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 8.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR .92

RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 42.8 (109.0) | 42.8 (109.0) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 40422. | 69370. | 40744. | 69346. |
| TOT FLOW STD. CU. METRES(SCF) | 74.9 ( 2645.) | 128.7 ( 4544.) | 75.6 ( 2669.) | 128.6 ( 4542.) |
| THC SAMPLE METER/RANGE/PPM | 52.7/ 2/ 52. | 9.0/ 2/ 9. | 13.0/ 2/ 13. | 9.9/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 9.4/ 2/ 9. | 10.2/ 2/ 10. | 9.5/ 2/ 9. | 10.5/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | 79.8/ 12/ 194. | 2.1/ 12/ 2. | 16.2/ 12/ 16. | 2.5/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .4/ 13/ 1. | .4/ 12/ 0. | .4/ 12/ 0. | .5/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 94.6/ 14/ .9864 | 79.6/ 14/ .6517 | 90.9/ 14/ .8890 | 79.7/ 14/ .6535 |
| CO2 BCKGRD METER/RANGE/PCT | 13.1/ 14/ .0442 | 12.8/ 14/ .0430 | 12.7/ 14/ .0426 | 13.0/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | 26.5/ 1/ 6.7 | 8.4/ 1/ 2.2 | 3.4/ 1/ .9 | .1/ 1/ .0 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 | .2/ 1/ .1 | .0/ 1/ .0 | .0/ 1/ .0 |
| DILUTION FACTOR | 11.91 | 18.43 | 13.49 | 18.38 |
| THC CONCENTRATION PPM | 44. | 0. | 4. | 0. |
| CO CONCENTRATION PPM | 185. | 2. | 15. | 2. |
| CO2 CONCENTRATION PCT | .9459 | .6110 | .8496 | .6121 |
| NOX CONCENTRATION PPM | 6.6 | 2.1 | .9 | .0 |
| THC MASS GRAMS | 3.63 | .00 | .35 | .00 |
| CO MASS GRAMS | 16.14 | .24 | 1.30 | .28 |
| CO2 MASS GRAMS | 1297.3 | 1439.5 | 1175.6 | 1441.5 |
| NOX MASS GRAMS | .87 | .48 | .12 | .01 |
| THC GRAMS/MI | 1.01 | .00 | .10 | .00 |
| CO GRAMS/MI | 4.50 | .06 | .36 | .07 |
| CO2 GRAMS/MI | 361.7 | 374.8 | 327.1 | 372.8 |
| NOX GRAMS/MI | .24 | .13 | .03 | .00 |
| FUEL ECONOMY IN MPG | 13.31 13.23 | 13.15 | 15.04 14.04 | 13.22 |
| RUN TIME SECONDS | 505. | 867. | 510. | 867. |
| MEASURED DISTANCE MI | 3.59 7.43 | 3.84 | 3.59 7.46 | 3.87 |
| SCF, DRY | .970 .973 | .976 | .972 .974 | .975 |
| DFC, WET (DRY) | .935( .922) | | .938( .926) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 203.6/ .00 | | 204.2/ .00 | |

MPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | 82CDCC-02 |
| BAROMETER | MM HG | 743.0 |
| HUMIDITY | G/KG | 8.1 |
| TEMPERATURE | DEG C | 24.4 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 358.9 | ( 358.4) |
| FUEL ECONOMY | MPG | 13.66 | ( 13.66) |
| HYDROCARBONS (THC) | G/MI | .24 | ( .24) |
| CARBON MONOXIDE | G/MI | 1.07 | ( 1.07) |
| OXIDES OF NITROGEN | G/MI | .12 | ( .09) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

| | | |
|---|---|---|
| TEST NO. 32CDCC-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| VEHICLE MODEL 89 CORSICA | DATE 3/27/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| ENGINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-[illegible] |
| TRANSMISSION A3 | DYNO NO. 3 | ODOMETER 2937. KM( 1825. MILES) |
| | CVS NO. 2 | |
| BAROMETER 742.19 MM HG(29.22 IN HG) | DRY BULB TEMP. 25.0 DEG C(77.0 DEG F) | |
| RELATIVE HUMIDITY 42. PCT | ABS. HUMIDITY 8.6 GM/KG | NOX HUMIDITY CORRECTION FACTOR .93 |

BAG RESULTS

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 61154. |
| TOT FLOW STD. CU. METRES(SCF) | 113.3 ( 4002.) |
| THC SAMPLE METER/RANGE/PPM | 12.5/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 10.9/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 17.0/ 12/ 15. |
| CO BCKGRD METER/RANGE/PPM | 1.0/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 57.7/ 1/1.2452 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | 13.6/ 1/ 3.5 |
| NOX BCKGRD METER/RANGE/PPM | .0/ 1/ .0 |
| DILUTION FACTOR | 9.64 |
| THC CONCENTRATION PPM | 3. |
| CO CONCENTRATION PPM | 15. |
| CO2 CONCENTRATION PCT | 1.2035 |
| NOX CONCENTRATION PPM | 3.5 |
| THC MASS GRAMS | .35 |
| CO MASS GRAMS | 1.95 |
| CO2 MASS GRAMS | 2497.0 |
| NOX MASS GRAMS | .71 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .896 ( .884) |
| SCF, WET (DRY) | 1.000 ( .965) |
| VOL (SCM) | 113.3 |
| GAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.21 |
| TEST NUMBER, | 32CDCC-02 |
| BAROMETER, MM HG | 742.2 |
| HUMIDITY, G/KG | 8.6 |
| TEMPERATURE, DEG C | 25.0 |
| CARBON DIOXIDE, G/MI | 244.4 |
| FUEL ECONOMY, MPG | 20.1 |
| HYDROCARBONS, (THC) G/MI | .03 |
| CARBON MONOXIDE, G/MI | .19 |
| OXIDES OF NITROGEN, G/MI | .07 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-8346-001

| | | |
|---|---|---|
| T NO. 920000-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| IDLE MODEL 89 CORSICA | DATE 3/27/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| INE 2.8 L(171. CID) V-6 | BAG CART NO. 3 | GASOLINE EM-996-F |
| NSMISSION AS | DYNO NO. 3 | ODOMETER 3953. KM( 1835. MILES) |
| | CVS NO. 2 | |
| OMETER 742.19 MM HG(29.22 IN HG) | DRY BULB TEMP. 25.0 DEG C(77.0 DEG F) | |
| ATIVE HUMIDITY 42. PCT | ABS. HUMIDITY 8.6 GM/KG | NOX HUMIDITY CORRECTION FACTOR .93 |

RESULTS

| TEST CYCLE | NYCC |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 49035. |
| TOT FLOW STD. CU. METRES(SCF) | 89.0 ( 3143.) |
| THC SAMPLE METER/RANGE/PPM | 11.8/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 10.8/ 3/ 11. |
| CO SAMPLE METER/RANGE/PPM | 22.2/ 10/ 23. |
| CO BCKGRD METER/RANGE/PPM | .6/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 71.3/ 14/ .3254 |
| CO2 BCKGRD METER/RANGE/PCT | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | .0/ 1/ .0 |
| NOX BCKGRD METER/RANGE/PPM | .0/ 1/ .0 |
| DILUTION FACTOR | 22.76 |
| THC CONCENTRATION PPM | 1. |
| CO CONCENTRATION PPM | 21. |
| CO2 CONCENTRATION PCT | .4320 |
| NOX CONCENTRATION PPM | .0 |
| THC MASS GRAMS | .14 |
| CO MASS GRAMS | 2.22 |
| CO2 MASS GRAMS | 735.4 |
| NOX MASS GRAMS | .00 |
| RUN TIME SECONDS | 691. |
| DFC, WET (DRY) | .956 ( .943) |
| DCF, WET (DRY) | 1.000 ( .977) |
| VOL (SCM) | 89.0 |
| BAM BLR (SCM) | .00 |
| AI (MEASURED) | 1.15 |

| | | |
|---|---|---|
| TEST NUMBER. | | 920000-02 |
| BAROMETER. | MM HG | 742.2 |
| HUMIDITY. | G/KG | 8.6 |
| TEMPERATURE. | DEG C | 25.0 |
| CARBON DIOXIDE. | G/MI | 677.7 |
| FUEL ECONOMY. | MPG | 7.2 |
| HYDROCARBONS, (THC) | G/MI | .13 |
| CARBON MONOXIDE. | G/MI | 1.91 |
| OXIDES OF NITROGEN. | G/MI | .00 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2CJM4-01 RUN 1 | VEHICLE NO. 934 | TEST WEIGHT 1417. KG( 3125. LBS)
VEHICLE MODEL 89 CORSICA | DATE 5/29/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
ENGINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 / CVS NO. 2 | M85 EM-998-F
TRANSMISSION A3 | DYNO NO. 3 | ODOMETER 2968. KM( 1844. MILES)

BAROMETER 735.33 MM HG(28.95 IN HG) | DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
RELATIVE HUMIDITY 59. PCT | ABS. HUMIDITY 11.3 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.02

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 764.5 (30.1) | 767.1 (30.2) | 767.1 (30.2) | 767.1 (30.2) |
| BLOWER INLET P MM. H2O(IN. H2O) | 764.5 (30.1) | 764.5 (30.1) | 764.5 (30.1) | 764.5 (30.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) | 40.6 (105.0) | 41.7 (107.0) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 40417. | 69401. | 40422. | 69348. |
| TOT FLOW STD. CU. METRES(SCF) | 74.7 ( 2636.) | 128.4 ( 4535.) | 74.7 ( 2636.) | 128.1 ( 4522.) |
| THC SAMPLE METER/RANGE/PPM | 54.2/ 2/ 54. | 12.3/ 2/ 12. | 22.8/ 2/ 23. | 11.2/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | 12.5/ 2/ 12. | 13.0/ 2/ 13. | 10.8/ 2/ 11. | 11.3/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 81.1/ 12/ 81. | 2.2/ 12/ 2. | 26.3/ 12/ 26. | 2.4/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | 2.4/ 12/ 2. | 1.5/ 12/ 1. | 1.1/ 12/ 1. | .8/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 57.7/ 1/1.0587 | 82.6/ 14/ .7875 | 92.7/ 14/ .9349 | 81.8/ 14/ .6922 |
| CO2 BCKGRD METER/RANGE/PCT | 2.6/ 1/ .0459 | 12.8/ 14/ .0430 | 12.7/ 14/ .0426 | 12.7/ 14/ .0426 |
| NOX SAMPLE METER/RANGE/PPM | 27.2/ 1/ 6.9 | 4.2/ 1/ 1.1 | 5.1/ 1/ 1.3 | 1.8/ 1/ .5 |
| NOX BCKGRD METER/RANGE/PPM | .7/ 1/ .2 | 1.2/ 1/ .3 | .4/ 1/ .1 | .1/ 1/ .0 |
| DILUTION FACTOR | 11.23 | 16.98 | 12.81 | 17.35 |
| THC CONCENTRATION PPM | 42. | 0. | 13. | 1. |
| CO CONCENTRATION PPM | 75. | 1. | 24. | 1. |
| CO2 CONCENTRATION PCT | 1.0169 | .6670 | .8956 | .6520 |
| NOX CONCENTRATION PPM | 6.7 | .8 | 1.2 | .5 |
| THC MASS GRAMS | 3.52 | .01 | 1.06 | .00 |
| CO MASS GRAMS | 6.52 | .10 | 2.05 | .22 |
| CO2 MASS GRAMS | 1389.9 | 1568.5 | 1224.2 | 1528.7 |
| NOX MASS GRAMS | .98 | .20 | .18 | .11 |
| THC GRAMS/MI | .97 | .00 | .29 | .02 |
| CO GRAMS/MI | 1.79 | .03 | .56 | .06 |
| CO2 GRAMS/MI | 381.7 | 401.3 | 337.8 | 398.7 |
| NOX GRAMS/MI | .27 | .05 | .05 | .03 |
| FUEL ECONOMY IN MPG | 12.77 12.52 | 12.29 | 14.54 13.47 | 12.62 |
| RUN TIME SECONDS | 505. | 868. | 505. | 867. |
| MEASURED DISTANCE MI | 3.64 7.55 | 3.91 | 3.62 7.54 | 3.91 |
| SCF, DRY | .963 .967 | .969 | .965 .968 | .969 |
| DFC, WET (DRY) | .930( .912) | | .935( .917) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 283.1/ .00 | | 282.7/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | | B2CJM4-01 | | |
| BAROMETER | MM HG | 735.3 | | |
| HUMIDITY | G/KG | 11.3 | | |
| TEMPERATURE | DEG C | 23.9 | | |
| CARBON DIOXIDE | G/MI | | 379.8 | ( 376.7) |
| FUEL ECONOMY | MPG | | 12.94 | ( 13.04) |
| HYDROCARBONS (THC) | G/MI | | .28 | ( .29) |
| CARBON MONOXIDE | G/MI | | .54 | ( .55) |
| OXIDES OF NITROGEN | G/MI | | .10 | ( .09) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

| | | |
|---|---|---|
| ST NO. B2CJM4-01 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 5/29/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | M85 EM-998-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 2992. KM( 1859. MILES) |
| | CVS NO. 2 | |
| ROMETER 734.06 MM HG(28.90 IN HG) | DRY BULB TEMP. 23.3 DEG C(74.0 DEG F) | |
| LATIVE HUMIDITY 58. PCT | ABS. HUMIDITY 10.8 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.00 |

G RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 774.7 (30.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 774.7 (30.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.8 (109.0) |
| BLOWER REVOLUTIONS | | 61221. |
| TOT FLOW STD. CU. METRES(SCF) | | 112.5 ( 3971.) |
| THC SAMPLE METER/RANGE/PPM | | 12.6/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | | 11.2/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | | 20.2/ 12/ 20. |
| CO BCKGRD METER/RANGE/PPM | | 3.6/ 12/ 3. |
| CO2 SAMPLE METER/RANGE/PCT | | 71.0/ 1/1.3083 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | | 4.1/ 1/ 1.1 |
| NOX BCKGRD METER/RANGE/PPM | | 1.8/ 1/ .5 |
| DILUTION FACTOR | | 9.18 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 16. |
| CO2 CONCENTRATION PCT | | 1.2658 |
| NOX CONCENTRATION PPM | | .7 |
| THC MASS GRAMS | | .32 |
| CO MASS GRAMS | | 2.83 |
| CO2 MASS GRAMS | | 2606.4 |
| NOX MASS GRAMS | | .14 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .891 ( .874) |
| SCF, WET (DRY) | | 1.000 ( .959) |
| VOL (SCM) | | 112.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.21 |
| TEST NUMBER, | | B2CJM4-01 |
| BAROMETER, | MM HG | 734.1 |
| HUMIDITY, | G/KG | 10.8 |
| TEMPERATURE, | DEG C | 23.3 |
| CARBON DIOXIDE, | G/MI | 255.3 |
| FUEL ECONOMY, | MPG | 19.3 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .20 |
| OXIDES OF NITROGEN, | G/MI | .01 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

EST NO. 92CJM4-01 RUN 1
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 733.81 MM HG(28.89 IN HG)
ELATIVE HUMIDITY 50. PCT
AG RESULTS

VEHICLE NO.934
DATE 5/29/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)
ABS. HUMIDITY 10.6 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
M85 EM-998-F
ODOMETER 3008. KM( 1869. MILES)
NOX HUMIDITY CORRECTION FACTOR 1.00

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 40.6 (105.0) |
| BLOWER REVOLUTIONS | | 47742. |
| TOT FLOW STD. CU. METRES(SCF) | | 88.2 ( 3114.) |
| THC SAMPLE METER/RANGE/PPM | | 11.7/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | | 10.5/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | | 9.4/ 12/ 9. |
| CO BCKGRD METER/RANGE/PPM | | 2.0/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 72.6/ 14/ .5372 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.0/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | | .8/ 1/ .2 |
| NOX BCKGRD METER/RANGE/PPM | | .8/ 1/ .2 |
| DILUTION FACTOR | | 22.32 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 7. |
| CO2 CONCENTRATION PCT | | .4954 |
| NOX CONCENTRATION PPM | | .0 |
| THC MASS GRAMS | | .16 |
| CO MASS GRAMS | | .71 |
| CO2 MASS GRAMS | | 799.9 |
| NOX MASS GRAMS | | .00 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .955 ( .940) |
| SCF, WET (DRY) | | 1.000 ( .975) |
| VOL (SCM) | | 88.2 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.15 |
| TEST NUMBER, | | 92CJM4-01 |
| BAROMETER, | MM HG | 733.8 |
| HUMIDITY, | G/KG | 10.6 |
| TEMPERATURE, | DEG C | 25.6 |
| CARBON DIOXIDE, | G/MI | 696.6 |
| FUEL ECONOMY, | MPG | 7.1 |
| HYDROCARBONS. (THC) | G/MI | .14 |
| CARBON MONOXIDE. | G/MI | .62 |
| OXIDES OF NITROGEN, | G/MI | .00 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

| | | |
|---|---|---|
| ST NO. B2CJM4-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 5/30/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 / CVS NO. 2 | M85 EM-998-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 3009. KM( 1870. MILES) |
| ROMETER 735.58 MM HG(28.96 IN HG) | DRY BULB TEMP. 25.6 DEG C(78.0 DEG F) | |
| LATIVE HUMIDITY 64. PCT | ABS. HUMIDITY 13.6 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.10 |

G RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H20(IN. H20) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 41.1 (106.0) | 42.8 (109.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40315. | 69419. | 40377. | 69349. |
| TOT FLOW STD. CU. METRES(SCF) | 74.3 ( 2624.) | 128.5 ( 4536.) | 74.5 ( 2630.) | 128.3 ( 4531.) |
| THC SAMPLE METER/RANGE/PPM | 74.2/ 2/ 73. | 15.4/ 2/ 15. | 16.4/ 2/ 16. | 13.0/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | 16.2/ 2/ 16. | 16.2/ 2/ 16. | 12.7/ 2/ 13. | 13.3/ 2/ 13. |
| CO SAMPLE METER/RANGE/PPM | 59.3/ 14/ 271. | 2.4/ 12/ 2. | 17.0/ 12/ 16. | 2.3/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .6/ 14/ 2. | 1.5/ 12/ 1. | 1.4/ 12/ 1. | 1.2/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 95.5/ 14/1.0120 | 88.5/ 14/ .6688 | 91.9/ 14/ .9142 | 88.5/ 14/ .6688 |
| CO2 BCKGRD METER/RANGE/PCT | 12.7/ 14/ .0426 | 12.7/ 14/ .0426 | 12.9/ 14/ .0434 | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | 21.3/ 1/ 5.4 | 3.1/ 1/ .8 | 8.3/ 1/ 2.2 | 2.4/ 1/ .6 |
| NOX BCKGRD METER/RANGE/PPM | .8/ 1/ .2 | .5/ 1/ .1 | .2/ 1/ .1 | .3/ 1/ .1 |
| DILUTION FACTOR | 11.51 | 17.97 | 13.12 | 17.98 |
| THC CONCENTRATION PPM | 59. | 0. | 5. | 0. |
| CO CONCENTRATION PPM | 255. | 1. | 14. | 1. |
| CO2 CONCENTRATION PCT | .9731 | .6277 | .8741 | .6251 |
| NOX CONCENTRATION PPM | 5.2 | .7 | 2.1 | .6 |
| THC MASS GRAMS | 4.86 | .01 | .38 | .06 |
| CO MASS GRAMS | 22.10 | .13 | 1.26 | .16 |
| CO2 MASS GRAMS | 1323.8 | 1476.2 | 1192.0 | 1468.5 |
| NOX MASS GRAMS | .82 | .19 | .33 | .15 |
| THC GRAMS/MI | 1.33 | .00 | .11 | .02 |
| CO GRAMS/MI | 6.07 | .03 | .35 | .04 |
| CO2 GRAMS/MI | 363.7 | 378.7 | 328.4 | 376.9 |
| NOX GRAMS/MI | .23 | .05 | .09 | .04 |
| FUEL ECONOMY IN MPG | 13.13 13.07 | 13.02 | 14.98 13.93 | 13.08 |
| RUN TIME SECONDS | 504. | 868. | 505. | 868. |
| MEASURED DISTANCE MI | 3.64 7.54 | 3.90 | 3.63 7.53 | 3.90 |
| SCF, DRY | .962 .966 | .968 | .964 .967 | .968 |
| DFC, WET (DRY) | .933( .914) | | .937( .917) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 282.8/ .00 | | 282.8/ .00 | |

MPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | B2CJM4-02 | CARBON DIOXIDE | G/MI | 361.7 | ( 361.2) |
| BAROMETER | MM HG 735.6 | FUEL ECONOMY | MPG | 13.53 | ( 13.55) |
| HUMIDITY | G/KG 13.6 | HYDROCARBONS (THC) | G/MI | .31 | ( .31) |
| TEMPERATURE | DEG C 25.6 | CARBON MONOXIDE | G/MI | 1.37 | ( 1.38) |
| | | OXIDES OF NITROGEN | G/MI | .10 | ( .09) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2CJN4-02 RUN 1
VEHICLE NO. 934
TEST WEIGHT 1417. KG( 3125. LBS)

VEHICLE MODEL 89 CORSICA
DATE 5/30/90
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)

ENGINE 2.8 L(171. CID) V-6
BAG CART NO. 2
M85 EM-998-F

TRANSMISSION A3
DYNO NO. 3
ODOMETER 3034. KM( 1885. MILES)

CVS NO. 2

BAROMETER 735.33 MM HG(28.95 IN HG)
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)

RELATIVE HUMIDITY 60. PCT
ABS. HUMIDITY 12.8 GM/KG
NOX HUMIDITY CORRECTION FACTOR 1.07

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 774.7 (30.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.8 (109.0) |
| BLOWER REVOLUTIONS | | 61222. |
| TOT FLOW STD. CU. METRES(SCF) | | 112.8 ( 3985.) |
| THC SAMPLE METER/RANGE/PPM | | 13.1/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | | 11.6/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | | 18.5/ 12/ 18. |
| CO BCKGRD METER/RANGE/PPM | | 1.5/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 68.2/ 1/1.2556 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | | 5.3/ 1/ 1.4 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 9.56 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 16. |
| CO2 CONCENTRATION PCT | | 1.2129 |
| NOX CONCENTRATION PPM | | 1.3 |
| THC MASS GRAMS | | .34 |
| CO MASS GRAMS | | 2.06 |
| CO2 MASS GRAMS | | 2585.8 |
| NOX MASS GRAMS | | .29 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .895 ( .878) |
| SCF, WET (DRY) | | 1.000 ( .959) |
| VOL (SCM) | | 112.8 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.27 |
| TEST NUMBER, | | B2CJN4-02 |
| BAROMETER, | MM HG | 735.3 |
| HUMIDITY. | G/KG | 12.8 |
| TEMPERATURE, | DEG C | 25.6 |
| CARBON DIOXIDE, | G/MI | 244.1 |
| FUEL ECONOMY, | MPG | 20.2 |
| HYDROCARBONS. (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .20 |
| OXIDES OF NITROGEN, | G/MI | .03 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

EST NO. B2CJM4-02 RUN 1
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

ARDMETER 735.33 MM HG(28.95 IN HG)
ELATIVE HUMIDITY 60. PCT
AG RESULTS

VEHICLE NO. 934
DATE 5/30/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 12.3 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
MBS EM-998-F
ODOMETER 3050. KM( 1895. MILES)

NOX HUMIDITY CORRECTION FACTOR 1.05

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 749.3 (29.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 47784. |
| TOT FLOW STD. CU. METRES(SCF) | | 88.3 ( 3119.) |
| THC SAMPLE METER/RANGE/PPM | | 12.4/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | | 10.8/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | | 9.1/ 12/ 9. |
| CO BCKGRD METER/RANGE/PPM | | 1.9/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 71.8/ 14/ .5254 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.5/ 14/ .0458 |
| NOX SAMPLE METER/RANGE/PPM | | 1.4/ 1/ .4 |
| NOX BCKGRD METER/RANGE/PPM | | .4/ 1/ .1 |
| DILUTION FACTOR | | 22.82 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 7. |
| CO2 CONCENTRATION PCT | | .4816 |
| NOX CONCENTRATION PPM | | .3 |
| THC MASS GRAMS | | .20 |
| CO MASS GRAMS | | .69 |
| CO2 MASS GRAMS | | 778.8 |
| NOX MASS GRAMS | | .85 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .956 ( .938) |
| SCF, WET (DRY) | | 1.000 ( .972) |
| VOL (SCM) | | 88.3 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.16 |
| TEST NUMBER, | | B2CJM4-02 |
| BAROMETER, | MM HG | 735.3 |
| HUMIDITY, | G/KG | 12.3 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 672.2 |
| FUEL ECONOMY, | MPG | 7.3 |
| HYDROCARBONS, (THC) | G/MI | .17 |
| CARBON MONOXIDE, | G/MI | .60 |
| OXIDES OF NITROGEN, | G/MI | .04 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

ST NO. B1CHCU-01 RUN 1
HICLE MODEL 89 CORSICA
GINE 3.3 L(171. CID) V-6
ANSMISSION A3

VEHICLE NO.934
DATE 3/ 6/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3672. KM( 1664. MILES)

ROMETER 735.33 MM HG(28.95 IN HG)
LATIVE HUMIDITY 59. PCT

DRY BULB TEMP. 24.4 DEG C(75.0 DEG F)
ABS. HUMIDITY 11.8 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.04

G RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 764.5 (30.1) | 762.0 (30.0) | 764.5 (30.1) | 764.5 (30.1) |
| BLOWER INLET P MM. H20(IN. H20) | 764.5 (30.1) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 43.3 (110.0) | 42.8 (109.0) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 40471. | 69426. | 40419. | 69440. |
| TOT FLOW STD. CU. METRES(SCF) | 74.6 ( 2634.) | 127.9 ( 4516.) | 74.5 ( 2632.) | 128.0 ( 4521.) |
| THC SAMPLE METER/RANGE/PPM | 40.1/ 2/ 40. | 12.6/ 2/ 12. | 14.9/ 2/ 15. | 14.2/ 2/ 14. |
| THC BCKGRD METER/RANGE/PPM | 11.6/ 2/ 11. | 13.0/ 2/ 13. | 12.7/ 2/ 13. | 13.8/ 2/ 14. |
| CO SAMPLE METER/RANGE/PPM | 43.7/ 13/ 102. | 3.3/ 12/ 3. | 13.3/ 12/ 12. | 28.4/ 12/ 28. |
| CO BCKGRD METER/RANGE/PPM | 1.0/ 13/ 2. | 2.1/ 12/ 2. | 2.0/ 12/ 2. | 1.7/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 60.2/ 1/1.1055 | 84.9/ 14/ .7535 | 95.3/ 14/1.0863 | 84.8/ 14/ .7514 |
| CO2 BCKGRD METER/RANGE/PCT | 2.9/ 1/ .0512 | 14.3/ 14/ .0490 | 14.6/ 14/ .0502 | 14.8/ 14/ .0510 |
| NOX SAMPLE METER/RANGE/PPM | 19.0/ 1/ 4.9 | 6.0/ 1/ 1.6 | 19.5/ 1/ 5.0 | 3.2/ 1/ .8 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 | .3/ 1/ .1 | .1/ 1/ .0 | .0/ 1/ .0 |
| DILUTION FACTOR | 11.97 | 17.75 | 13.28 | 17.74 |
| THC CONCENTRATION PPM | 29. | 0. | 3. | 1. |
| CO CONCENTRATION PPM | 95. | 1. | 11. | 25. |
| CO2 CONCENTRATION PCT | 1.0586 | .7072 | .9598 | .7032 |
| NOX CONCENTRATION PPM | 4.7 | 1.5 | 5.0 | .8 |
| THC MASS GRAMS | 1.25 | .02 | .13 | .09 |
| CO MASS GRAMS | 8.29 | .18 | .92 | 3.77 |
| CO2 MASS GRAMS | 1446.0 | 1656.1 | 1309.7 | 1648.5 |
| NOX MASS GRAMS | .70 | .38 | .73 | .21 |
| THC GRAMS/MI | .35 | .01 | .04 | .02 |
| CO GRAMS/MI | 2.31 | .05 | .26 | .97 |
| CO2 GRAMS/MI | 402.6 | 431.6 | 365.8 | 426.4 |
| NOX GRAMS/MI | .19 | .10 | .28 | .06 |
| FUEL ECONOMY IN MPG | 21.77 21.12 | 20.54 | 24.21 22.26 | 20.72 |
| RUN TIME SECONDS | 505. | 868. | 505. | 868. |
| MEASURED DISTANCE MI | 3.59 7.43 | 3.84 | 3.58 7.45 | 3.87 |
| SCF, DRY | .971 .973 | .974 | .972 .973 | .974 |
| DFC, WET (DRY) | .934( .916) | | .937( .919) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 282.5/ .00 | | 282.6/ .00 | |

MPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1CHCU-01 |
| BAROMETER | MM HG | 735.3 |
| HUMIDITY | G/KG | 11.8 |
| TEMPERATURE | DEG C | 24.4 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 407.5 | ( 406.0) |
| FUEL ECONOMY | MPG | 21.70 | ( 21.76) |
| HYDROCARBONS (THC) | G/MI | .09 | ( .09) |
| CARBON MONOXIDE | G/MI | .57 | ( .85) |
| OXIDES OF NITROGEN | G/MI | .15 | ( .13) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

ST NO. B1CHCU-01 RUN 1
HICLE MODEL 89 CORSICA
GINE 3.8 L(171. CID) V-6
ANSMISSION A3

ROMETER 734.06 MM HG(28.90 IN HG)
LATIVE HUMIDITY 60. PCT
G RESULTS

VEHICLE NO.934
DATE 3/ 6/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 12.3 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3782. KM( 1679. MILES)

NOX HUMIDITY CORRECTION FACTOR 1.05

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H20(IN. H20) | | 782.3 (30.8) |
| BLOWER INLET P MM. H20(IN. H20) | | 774.7 (30.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.8 (109.0) |
| BLOWER REVOLUTIONS | | 61258. |
| TOT FLOW STD. CU. METRES(SCF) | | 112.5 ( 3973.) |
| THC SAMPLE METER/RANGE/PPM | | 13.5/ 3/ 13. |
| THC BCKGRD METER/RANGE/PPM | | 12.6/ 3/ 12. |
| CO SAMPLE METER/RANGE/PPM | | 24.7/ 12/ 24. |
| CO BCKGRD METER/RANGE/PPM | | 1.5/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 72.8/ 1/1.3423 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.8/ 1/ .0494 |
| NOX SAMPLE METER/RANGE/PPM | | 22.3/ 1/ 5.7 |
| NOX BCKGRD METER/RANGE/PPM | | .3/ 1/ .1 |
| DILUTION FACTOR | | 9.96 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 22. |
| CO2 CONCENTRATION PCT | | 1.2978 |
| NOX CONCENTRATION PPM | | 5.6 |
| THC MASS GRAMS | | .14 |
| CO MASS GRAMS | | 2.84 |
| CO2 MASS GRAMS | | 3673.3 |
| NOX MASS GRAMS | | 1.27 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .900 ( .882) |
| SCF, WET (DRY) | | 1.000 ( .968) |
| VOL (SCM) | | 112.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.16 |
| TEST NUMBER. | | B1CHCU-01 |
| BAROMETER. | MM HG | 734.1 |
| HUMIDITY. | G/KG | 12.3 |
| TEMPERATURE. | DEG C | 25.0 |
| CARBON DIOXIDE. | G/MI | 363.3 |
| FUEL ECONOMY. | MPG | 33.6 |
| HYDROCARBONS. (THC) | G/MI | .01 |
| CARBON MONOXIDE. | G/MI | .28 |
| OXIDES OF NITROGEN. | G/MI | .12 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

ST NO. 91CHCU-01 RUN 1
HICLE MODEL 89 CORSICA
INE 3.8 L(171. CID) V-6
ANSMISSION A3

ROMETER 734.06 MM HG(28.90 IN HG)
LATIVE HUMIDITY 60. PCT
G RESULTS

VEHICLE NO. 934
DATE 3/ 6/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 12.3 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-9512-F
ODOMETER 3702. KM( 1679. MILES)

NOX HUMIDITY CORRECTION FACTOR 1.05

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 759.5 (29.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 756.9 (29.8) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 43.3 (110.0) |
| BLOWER REVOLUTIONS | | 47939. |
| TOT FLOW STD. CU. METRES(SCF) | | 88.2 ( 3115.) |
| THC SAMPLE METER/RANGE/PPM | | 50.6/ 2/ 50. |
| THC BCKGRD METER/RANGE/PPM | | 30.5/ 2/ 30. |
| CO SAMPLE METER/RANGE/PPM | | 91.0/ 13/ 224. |
| CO BCKGRD METER/RANGE/PPM | | .5/ 13/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 74.8/ 14/ .5711 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.2/ 14/ .0446 |
| NOX SAMPLE METER/RANGE/PPM | | 4.2/ 1/ 1.1 |
| NOX BCKGRD METER/RANGE/PPM | | .0/ 1/ .0 |
| DILUTION FACTOR | | 22.42 |
| THC CONCENTRATION PPM | | 21. |
| CO CONCENTRATION PPM | | 216. |
| CO2 CONCENTRATION PCT | | .5285 |
| NOX CONCENTRATION PPM | | 1.1 |
| THC MASS GRAMS | | 1.08 |
| CO MASS GRAMS | | 22.18 |
| CO2 MASS GRAMS | | 853.4 |
| NOX MASS GRAMS | | .80 |
| RUN TIME | SECONDS | 599. |
| DFC, WET (DRY) | | .955 ( .937) |
| DCF, WET (DRY) | | 1.000 ( .975) |
| VOL (SCM) | | 88.2 |
| BAR BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.15 |
| TEST NUMBER, | | 91CHCU-01 |
| BAROMETER, | MM HG | 734.1 |
| HUMIDITY, | G/KG | 12.3 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 748.5 |
| FUEL ECONOMY, | MPG | 11.5 |
| HYDROCARBONS, (THC) | G/MI | .94 |
| CARBON MONOXIDE, | G/MI | 19.34 |
| OXIDES OF NITROGEN, | G/MI | .17 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 06-2346-001

T NO. 91CHEU-02 RUN 1
ICLE MODEL 89 CORSICA
INE 2.3 L(171. CID) V-6
NSMISSION A3

VEHICLE NO. 934
DATE 3/ 7/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3720. KM( 1890. MILES)

OMETER 738.38 MM HG(29.07 IN HG)
LATIVE HUMIDITY 60. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 12.2 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.35

S RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 767.1 (30.2) | 767.1 (30.2) | 767.1 (30.2) | 769.6 (30.3) |
| BLOWER INLET P MM. H2O(IN. H2O) | 764.5 (30.1) | 764.5 (30.1) | 764.5 (30.1) | 764.5 (30.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 43.3 (110.0) | 42.8 (109.0) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 40442. | 69438. | 40416. | 69351. |
| TOT FLOW STD. CU. METRES(SCF) | 74.8 ( 2642.) | 128.5 ( 4536.) | 74.8 ( 2643.) | 128.4 ( 4534.) |
| THC SAMPLE METER/RANGE/PPM | 53.3/ 3/ 52. | 12.9/ 3/ 13. | 16.9/ 3/ 17. | 15.4/ 2/ 15. |
| THC BCKGRD METER/RANGE/PPM | 11.5/ 2/ 11. | 12.6/ 2/ 12. | 12.9/ 2/ 13. | 14.1/ 2/ 14. |
| CO SAMPLE METER/RANGE/PPM | 68.1/ 13/ 142. | 6.1/ 12/ 6. | 24.3/ 12/ 24. | 52.0/ 12/ 51. |
| CO BCKGRD METER/RANGE/PPM | .5/ 13/ 1. | 1.0/ 12/ 1. | .8/ 12/ 1. | 1.0/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 59.9/ 1/1.0999 | 84.9/ 14/ .7535 | 95.1/ 14/1.0006 | 84.5/ 14/ .7452 |
| CO2 BCKGRD METER/RANGE/PCT | 2.9/ 1/ .0512 | 14.6/ 14/ .0502 | 14.8/ 14/ .0510 | 15.0/ 14/ .0519 |
| NOX SAMPLE METER/RANGE/PPM | 30.5/ 1/ 5.2 | 4.5/ 1/ 1.2 | 16.5/ 1/ 4.3 | 2.3/ 1/ .6 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 1/ .1 | .4/ 1/ .1 | 1.0/ 1/ .3 | .9/ 1/ .2 |
| DILUTION FACTOR | 11.98 | 17.74 | 12.34 | 17.83 |
| THC CONCENTRATION PPM | 42. | 1. | 5. | 2. |
| CO CONCENTRATION PPM | 135. | 5. | 22. | 49. |
| CO2 CONCENTRATION PCT | 1.0530 | .7061 | .9533 | .6963 |
| NOX CONCENTRATION PPM | 5.1 | 1.1 | 4.1 | .4 |
| THC MASS GRAMS | 1.81 | .07 | .31 | .15 |
| CO MASS GRAMS | 11.80 | .71 | 1.92 | 7.27 |
| CO2 MASS GRAMS | 1442.3 | 1660.5 | 1306.2 | 1636.9 |
| NOX MASS GRAMS | .77 | .28 | .61 | .10 |
| THC GRAMS/MI | .50 | .02 | .06 | .04 |
| CO GRAMS/MI | 3.28 | .18 | .53 | 1.88 |
| CO2 GRAMS/MI | 401.1 | 429.7 | 362.7 | 423.4 |
| NOX GRAMS/MI | .21 | .07 | .17 | .03 |
| FUEL ECONOMY IN MPG | 21.74 21.15 | 20.62 | 24.35 23.33 | 20.79 |
| RUN TIME SECONDS | 505. | 868. | 505. | 867. |
| MEASURED DISTANCE MI | 3.60 7.46 | 3.86 | 3.60 7.47 | 3.87 |
| SCF. DRY | .971 .973 | .974 | .971 .973 | .974 |
| DEC. WET (DRY) | .934( .916) | | .937( .919) | |
| TOT VOL (SCM) / SAM FLR (SCM) | 203.3/ .00 | | 203.3/ .00 | |

POSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | 91CHEU-02 |
| BAROMETER | MM HG | 738.4 |
| HUMIDITY | G/KG | 12.2 |
| TEMPERATURE | DEG C | 25.0 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 405.3 | ( 403.5) |
| FUEL ECONOMY | MPG | 21.78 | ( 21.83) |
| HYDROCARBONS (THC) | G/MI | .13 | ( .14) |
| CARBON MONOXIDE | G/MI | .33 | ( 1.42) |
| OXIDES OF NITROGEN | G/MI | .13 | ( .11) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

HFET - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

| | | |
|---|---|---|
| ST NO. 91CHCU-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 3/ 7/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 3.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-995-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 2742. KM( 1704. MILES) |
| | CVS NO. 3 | |
| ROMETER 737.37 MM HG(29.05 IN HG) | DRY BULB TEMP. 24.4 DEG C(76.0 DEG F) | |
| LATIVE HUMIDITY 59. PCT | ABS. HUMIDITY 11.7 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.03 |

G RESULTS

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 782.3 (30.8) |
| BLOWER INLET P MM. H2O(IN. H2O) | 779.8 (30.7) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 61217. |
| TOT FLOW STD. CU. METRES(SCF) | 113.0 ( 3991.) |
| THC SAMPLE METER/RANGE/PPM | 16.3/ 2/ 16. |
| THC BCKGRD METER/RANGE/PPM | 14.0/ 2/ 14. |
| CO SAMPLE METER/RANGE/PPM | 28.0/ 12/ 27. |
| CO BCKGRD METER/RANGE/PPM | 1.0/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 73.1/ 1/1.3479 |
| CO2 BCKGRD METER/RANGE/PCT | 2.9/ 1/ .0512 |
| NOX SAMPLE METER/RANGE/PPM | 25.2/ 1/ 6.4 |
| NOX BCKGRD METER/RANGE/PPM | .9/ 1/ .2 |
| DILUTION FACTOR | 9.91 |
| THC CONCENTRATION PPM | 4. |
| CO CONCENTRATION PPM | 25. |
| CO2 CONCENTRATION PCT | 1.3019 |
| NOX CONCENTRATION PPM | 6.2 |
| THC MASS GRAMS | .24 |
| CO MASS GRAMS | 3.32 |
| CO2 MASS GRAMS | 2693.9 |
| NOX MASS GRAMS | 1.38 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .899 ( .882) |
| DCF, WET (DRY) | 1.002 ( .968) |
| VOL (SCM) | 113.0 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.24 |
| TEST NUMBER, | 91CHCU-02 |
| BAROMETER, MM HG | 737.9 |
| HUMIDITY, G/KG | 11.7 |
| TEMPERATURE, DEG C | 24.4 |
| CARBON DIOXIDE, G/MI | 263.1 |
| FUEL ECONOMY, MPG | 33.6 |
| HYDROCARBONS. (THC) G/MI | .02 |
| CARBON MONOXIDE, G/MI | .32 |
| OXIDES OF NITROGEN, G/MI | .13 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

NYCC - VEHICLE EMISSIONS RESULTS -

PROJECT 03-2346-001

| | | |
|---|---|---|
| ST NO. 91CHCU-02 RUN 1 | VEHICLE NO. 934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 3/ 7/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 3.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-9413-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 2537. KM( 1614. MILES) |
| | CVS NO. 2 | |
| ROMETER 737.62 MM HG(29.04 IN HG) | DRY BULB TEMP. 25.0 DEG C(77.0 DEG F) | |
| LATIVE HUMIDITY 56. PCT | ABS. HUMIDITY 11.5 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.03 |

G RESULTS

| TEST CYCLE | NYCC |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 47930. |
| TOT FLOW STD. CU. METRES(CUFT) | 88.7 ( 3131.) |
| THC SAMPLE METER/RANGE/PPM | 61.9/ 2/ 61. |
| THC BCKGRD METER/RANGE/PPM | 47.6/ 2/ 47. |
| CO SAMPLE METER/RANGE/PPM | 59.7/ 13/ 141. |
| CO BCKGRD METER/RANGE/PPM | .3/ 13/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 76.0/ 14/ .5903 |
| CO2 BCKGRD METER/RANGE/PCT | 14.6/ 14/ .0502 |
| NOX SAMPLE METER/RANGE/PPM | 5.1/ 1/ 1.3 |
| NOX BCKGRD METER/RANGE/PPM | 1.0/ 1/ .3 |
| DILUTION FACTOR | 21.96 |
| THC CONCENTRATION PPM | 16. |
| CO CONCENTRATION PPM | 136. |
| CO2 CONCENTRATION PCT | .5424 |
| NOX CONCENTRATION PPM | 1.1 |
| THC MASS GRAMS | .83 |
| CO MASS GRAMS | 14.08 |
| CO2 MASS GRAMS | 880.6 |
| NOX MASS GRAMS | .19 |
| RUN TIME SECONDS | 599. |
| DFC, WET (DRY) | .954 ( .937) |
| SCF, WET (DRY) | 1.000 ( .976) |
| VOL (SCM) | 88.7 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.17 |
| TEST NUMBER. | 91CHCU-02 |
| BAROMETER. MM HG | 737.6 |
| HUMIDITY. G/KG | 11.5 |
| TEMPERATURE. DEG C | 25.0 |
| CARBON DIOXIDE. G/MI | 752.1 |
| FUEL ECONOMY. MPG | 11.5 |
| HYDROCARBONS. (THC) G/MI | .71 |
| CARBON MONOXIDE. G/MI | 12.00 |
| OXIDES OF NITROGEN. G/MI | .16 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

ST NO. B1CDCC-01 RUN 1
HICLE MODEL 89 CORSICA
SINE 3.8 L(171. CID) V-6
NSMISSION A3

VEHICLE NO.934
DATE 3/22/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EX-935-F
ODOMETER 2772. KM( 1722. MILES)

ROMETER 741.43 MM HG(29.19 IN HG)
LATIVE HUMIDITY 49. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

NOX HUMIDITY CORRECTION FACTOR .98

G RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H20(IN. H20) | 736.6 (29.0) | 736.6 (29.0) | 736.6 (29.0) | 736.6 (29.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 43.3 (110.0) | 43.3 (110.0) | 43.3 (110.0) |
| BLOWER REVOLUTIONS | 40447. | 69318. | 40425. | 69312. |
| TOT FLOW STD. CU. METRES(SCF) | 75.4 ( 2663.) | 129.2 ( 4563.) | 75.4 ( 2661.) | 129.2 ( 4563.) |
| THC SAMPLE METER/RANGE/PPM | 62.6/ 2/ 62. | 9.7/ 2/ 10. | 9.4/ 2/ 9. | 9.1/ 2/ 9. |
| THC BCKGRD METER/RANGE/PPM | 7.8/ 2/ 8. | 8.8/ 2/ 9. | 7.1/ 2/ 7. | 8.0/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | 66.0/ 13/ 157. | 1.9/ 12/ 2. | 5.6/ 12/ 5. | 16.7/ 12/ 16. |
| CO BCKGRD METER/RANGE/PPM | .1/ 13/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .2/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 59.1/ 1/1.0849 | 84.6/ 14/ .7473 | 94.9/ 14/ .9949 | 84.4/ 14/ .7432 |
| CO2 BCKGRD METER/RANGE/PCT | 3.5/ 1/ .0441 | 12.6/ 14/ .0422 | 11.9/ 14/ .0395 | 12.0/ 14/ .0399 |
| NOX SAMPLE METER/RANGE/PPM | 18.4/ 1/ 4.7 | 16.1/ 1/ 4.1 | 29.2/ 1/ 7.4 | .6/ 1/ .2 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 1/ .0 | .1/ 1/ .0 | .3/ 1/ .1 | .3/ 1/ .1 |
| DILUTION FACTOR | 12.11 | 17.90 | 13.45 | 17.97 |
| THC CONCENTRATION PPM | 55. | 1. | 3. | 2. |
| CO CONCENTRATION PPM | 151. | 2. | 5. | 15. |
| CO2 CONCENTRATION PCT | 1.0444 | .7074 | .9583 | .7055 |
| NOX CONCENTRATION PPM | 4.7 | 4.1 | 7.3 | .1 |
| THC MASS GRAMS | 2.39 | .10 | .12 | .11 |
| CO MASS GRAMS | 13.29 | .86 | .45 | 2.33 |
| CO2 MASS GRAMS | 1442.0 | 1673.3 | 1322.3 | 1669.1 |
| NOX MASS GRAMS | .66 | .99 | 1.02 | .02 |
| THC GRAMS/MI | .67 | .03 | .03 | .03 |
| CO GRAMS/MI | 3.71 | .27 | .13 | .61 |
| CO2 GRAMS/MI | 402.1 | 434.2 | 369.4 | 433.8 |
| NOX GRAMS/MI | .18 | .26 | .29 | .01 |
| FUEL ECONOMY IN MPG | 21.63 20.98 | 20.42 | 23.99 21.98 | 20.39 |
| RUN TIME SECONDS | 506. | 867. | 506. | 867. |
| MEASURED DISTANCE MI | 3.59 7.44 | 3.86 | 3.59 7.43 | 3.85 |
| SCF, DRY | .974 .976 | .977 | .975 .976 | .977 |
| DFC, WET (DRY) | .934( .919) | | .937( .923) | |
| TOT VOL (SCM) / BAR BLR (SCM) | 284.6/ .00 | | 284.6/ .00 | |

POSITE RESULTS

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| TEST NUMBER B1CDCC-01 | | | |
| BAROMETER MM HG 741.4 | CARBON DIOXIDE G/MI | 409.7 | ( 409.6) |
| HUMIDITY G/KG 10.0 | FUEL ECONOMY MPG | 21.55 | ( 21.54) |
| TEMPERATURE DEG C 25.0 | HYDROCARBONS (THC) G/MI | .16 | ( .16) |
| | CARBON MONOXIDE G/MI | .54 | ( 1.00) |
| | OXIDES OF NITROGEN G/MI | .25 | ( .18) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-8346-001

T NO. B1CCCC-01 RUN 1
HICLE MODEL 89 CORSICA
GINE 2.8 L(171. CID) V-6
MISSION A3

ROMETER 740.66 MM HG(29.16 IN HG)
LATIVE HUMIDITY 50. PCT
3 RESULTS

VEHICLE NO.934
DATE 3/22/90
BAG CART NO. 3
DYNO NO. 3
CVS NO. 3
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)
ABS. HUMIDITY 10.5 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-9505-F
ODOMETER 2797. KM( 1738. MILES)

NOX HUMIDITY CORRECTION FACTOR .99

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 736.6 (29.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 43.3 (110.0) |
| BLOWER REVOLUTIONS | | 61180. |
| TOT FLOW STD. CU. METRES(SCF) | | 113.9 ( 4023.) |
| THC SAMPLE METER/RANGE/PPM | | 10.0/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | | 7.1/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | 8.3/ 10/ 8. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 10/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 73.4/ 1/1.3535 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.3/ 1/ .0406 |
| NOX SAMPLE METER/RANGE/PPM | | 47.0/ 1/ 11.8 |
| NOX BCKGRD METER/RANGE/PPM | | .3/ 1/ .1 |
| DILUTION FACTOR | | 3.89 |
| THC CONCENTRATION PPM | | 4. |
| CO CONCENTRATION PPM | | 8. |
| CO2 CONCENTRATION PCT | | 1.3171 |
| NOX CONCENTRATION PPM | | 11.7 |
| THC MASS GRAMS | | .24 |
| CO MASS GRAMS | | 1.01 |
| CO2 MASS GRAMS | | 2747.4 |
| NOX MASS GRAMS | | 3.33 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .899 ( .884) |
| DCF, WET (DRY) | | 1.000 ( .971) |
| VOL (SCM) | | 113.9 |
| SAM FLR (SCM) | | .00 |
| MI (MEASURED) | | 10.09 |
| TEST NUMBER. | | B1CCCC-01 |
| BAROMETER. | MM HG | 740.7 |
| HUMIDITY. | G/KG | 10.5 |
| TEMPERATURE. | DEG C | 25.6 |
| CARBON DIOXIDE. | G/MI | 272.4 |
| FUEL ECONOMY. | MPG | 22.5 |
| HYDROCARBONS. (THC) | G/MI | .02 |
| CARBON MONOXIDE. | G/MI | .10 |
| OXIDES OF NITROGEN. | G/MI | .33 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

NYCC - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-221

| | | |
|---|---|---|
| T NO. B1CDCC-01 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 5/22/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 3.8 L(171. CID) V-6 | BAG CART NO. 3 | GASOLINE EM-9905-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 3303. KM( 1742. MILES) |
| | CVS NO. 2 | |
| ROMETER 740.66 MM HG(29.16 IN HG) | DRY BULB TEMP. 25.6 DEG C(78.0 DEG F) | |
| LATIVE HUMIDITY 59. PCT | ABS. HUMIDITY 10.5 GM/KG | NOX HUMIDITY CORRECTION FACTOR .99 |
| S RESULTS | | |
| TEST CYCLE | NYCC | |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | |
| BLOWER INLET P MM. H2O(IN. H2O) | 736.6 (29.0) | |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | |
| BLOWER REVOLUTIONS | 47815. | |
| TOT FLOW STD. CU. METRES(SCF) | 89.1 ( 3147.) | |
| THC SAMPLE METER/RANGE/PPM | 34.1/ 2/ 34. | |
| THC BCKGRD METER/RANGE/PPM | 24.7/ 2/ 24. | |
| CO SAMPLE METER/RANGE/PPM | 45.3/ 12/ 45. | |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. | |
| CO2 SAMPLE METER/RANGE/PCT | 73.3/ 14/ .5555 | |
| CO2 BCKGRD METER/RANGE/PCT | 11.3/ 14/ .0391 | |
| NOX SAMPLE METER/RANGE/PPM | .7/ 1/ .2 | |
| NOX BCKGRD METER/RANGE/PPM | .6/ 1/ .2 | |
| DILUTION FACTOR | 23.79 | |
| THC CONCENTRATION PPM | 10. | |
| CO CONCENTRATION PPM | 43. | |
| CO2 CONCENTRATION PCT | .5160 | |
| NOX CONCENTRATION PPM | .0 | |
| THC MASS GRAMS | .52 | |
| CO MASS GRAMS | 4.50 | |
| CO2 MASS GRAMS | 545.2 | |
| NOX MASS GRAMS | .01 | |
| RUN TIME SECONDS | 598. | |
| STD, WET (DRY) | .958 ( .943) | |
| SCF, WET (DRY) | 1.000 ( .979) | |
| VOL (SCM) | 89.1 | |
| SAM BLR (SCM) | .00 | |
| MI (MEASURED) | 1.15 | |
| TEST NUMBER. | B1CDCC-01 | |
| BAROMETER. MM HG | 740.7 | |
| HUMIDITY. G/KG | 10.5 | |
| TEMPERATURE. DEG C | 25.5 | |
| CARBON DIOXIDE. G/MI | 737.2 | |
| FUEL ECONOMY. MPG | 11.3 | |
| HYDROCARBONS. (THC) G/MI | .45 | |
| CARBON MONOXIDE. G/MI | 3.92 | |
| OXIDES OF NITROGEN. G/MI | .03 | |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-8346-001

| | | |
|---|---|---|
| T NO. B1CDDC-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 3/23/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 3.8 L(231. CID) V-6 | SAE CART NO. 2 / CVS NO. 2 | GASOLINE EM-335-F |
| NSMISSION A3 | DYNO NO. 3 | ODOMETER 3333. KM( 1752. MILES) |
| ROMETER 743.45 MM HG(29.27 IN HG) | DRY BULB TEMP. 25.6 DEG C(78.8 DEG F) | |
| LATIVE HUMIDITY 46. PCT | ABS. HUMIDITY 9.7 GM/KG | NOX HUMIDITY CORRECTION FACTOR .97 |

G RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) | 43.3 (110.0) | 43.3 (110.0) | 43.3 (110.0) |
| BLOWER REVOLUTIONS | 40399. | 69296. | 40394. | 69253. |
| TOT FLOW STD. CU. METERS(SCF) | 74.8 ( 2640.) | 128.5 ( 4535.) | 74.9 ( 2644.) | 128.4 ( 4535.) |
| THC SAMPLE METER/RANGE/PPM | 61.6/ 2/ 91. | 9.6/ 2/ 9. | 14.2/ 2/ 14. | 9.6/ 2/ 9. |
| THC BCKGRD METER/RANGE/PPM | 8.7/ 2/ 9. | 9.6/ 2/ 9. | 8.6/ 2/ 9. | 9.5/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | 74.1/ 13/ 179. | .5/ 12/ 8. | 6.5/ 13/ 6. | 4.2/ 12/ 4. |
| CO BCKGRD METER/RANGE/PPM | .1/ 13/ 0. | .5/ 12/ 8. | .8/ 13/ 0. | .8/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 58.3/ 1/1.0699 | 83.9/ 14/ .7331 | 93.1/ 14/ .9455 | 83.4/ 14/ .7231 |
| CO2 BCKGRD METER/RANGE/PCT | 8.4/ 1/ .0423 | 12.2/ 14/ .0407 | 11.8/ 14/ .0391 | 12.3/ 14/ .0411 |
| NOX SAMPLE METER/RANGE/PPM | 28.7/ 1/ 5.3 | 11.9/ 1/ 3.1 | 10.8/ 1/ 2.8 | 1.7/ 1/ .4 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 1/ .1 | .8/ 1/ .3 | .1/ 1/ .0 | .1/ 1/ .0 |
| DILUTION FACTOR | 12.26 | 18.25 | 14.14 | 18.50 |
| THC CONCENTRATION PPM | 53. | 1. | 6. | 1. |
| CO CONCENTRATION PPM | 172. | 0. | 6. | 4. |
| CO2 CONCENTRATION PCT | 1.0311 | .5946 | .9091 | .6843 |
| NOX CONCENTRATION PPM | 5.2 | 3.1 | 2.8 | .4 |
| THC MASS GRAMS | 2.39 | .04 | .35 | .04 |
| CO MASS GRAMS | 14.97 | .00 | .53 | .58 |
| CO2 MASS GRAMS | 1411.6 | 1634.4 | 1346.6 | 1609.8 |
| NOX MASS GRAMS | .72 | .73 | .33 | .10 |
| THC GRAMS/MI | .64 | .01 | .07 | .01 |
| CO GRAMS/MI | 4.19 | .00 | .15 | .15 |
| CO2 GRAMS/MI | 395.2 | 426.2 | 349.7 | 418.7 |
| NOX GRAMS/MI | .20 | .19 | .11 | .03 |
| FUEL ECONOMY IN MPG | 21.96 21.35 | 20.81 | 25.33 22.38 | 21.17 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.57 7.41 | 3.83 | 3.56 7.41 | 3.84 |
| SCF, DRY | .975 .977 | .978 | .975 .978 | .978 |
| DEL. WET (SCF) | .935( .931) | | .940( .935) | |
| TOT. VOL (SCM) / DRY BLR (SCM) | 283.3/ .00 | | 283.3/ .00 | |

COMPOSITE RESULTS

| | | | |
|---|---|---|---|
| TEST NUMBER | B1CDDC-02 | | |
| BAROMETER | MM HG | 743.5 | |
| HUMIDITY | G/KG | 9.7 | |
| TEMPERATURE | DEG C | 25.6 | |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 398.8 | ( 396.6) |
| FUEL ECONOMY | MPG | 22.13 | ( 22.25) |
| HYDROCARBONS (THC) | G/MI | .16 | ( .16) |
| CARBON MONOXIDE | G/MI | .31 | ( .35) |
| OXIDES OF NITROGEN | G/MI | .17 | ( .12) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 03-2346-001

| | | |
|---|---|---|
| ST NO. 21CDCC-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| HICLE MODEL 89 CORSICA | DATE 3/23/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| GINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-995-F |
| ANSMISSION A3 | DYNO NO. 3 | ODOMETER 2842. KM( 1766. MILES) |
| | CVS NO. 2 | |
| ROMETER 742.44 MM HG(29.23 IN HG) | DRY BULB TEMP. 24.4 DEG C(76.0 DEG F) | |
| LATIVE HUMIDITY 48. PCT | ABS. HUMIDITY 9.5 GM/KG | NOX HUMIDITY CORRECTION FACTOR .95 |

AG RESULTS

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.9 (111.0) |
| BLOWER REVOLUTIONS | 61132. |
| TOT FLOW STD. CU. METRES(SCF) | 113.1 ( 3993.) |
| THC SAMPLE METER/RANGE/PPM | 11.3/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | 9.2/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | 2.3/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .4/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 73.8/ 1/1.3512 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | 42.9/ 1/ 10.8 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 |
| DILUTION FACTOR | 9.83 |
| THC CONCENTRATION PPM | 3. |
| CO CONCENTRATION PPM | 2. |
| CO2 CONCENTRATION PCT | 1.3184 |
| NOX CONCENTRATION PPM | 10.7 |
| THC MASS GRAMS | .20 |
| CO MASS GRAMS | .23 |
| CO2 MASS GRAMS | 2729.4 |
| NOX MASS GRAMS | 2.22 |
| RUN TIME SECONDS | 766. |
| CFC, WET (DRY) | .898 ( .884) |
| SCF, WET (DRY) | 1.000 ( .972) |
| VOL (SCM) | 113.1 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.16 |

| | | |
|---|---|---|
| TEST NUMBER, | | 21CDCC-02 |
| BAROMETER, | MM HG | 742.4 |
| HUMIDITY, | G/KG | 9.5 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 288.5 |
| FUEL ECONOMY, | MPG | 33.0 |
| HYDROCARBONS, (THC) | G/MI | .02 |
| CARBON MONOXIDE, | G/MI | .02 |
| OXIDES OF NITROGEN, | G/MI | .22 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-8346-821

TEST NO. B1CDCC-82 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS)
VEHICLE MODEL 88 CORSICA | DATE 8/23/82 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
ENGINE 2.8 L(171. CID) V-6 | EAG CART NO. 2 | GASOLINE EM-9918-F
TRANSMISSION A3 | DYNO NO. 3 | ODOMETER 3881. KM( 1776. MILES)
CVS NO. 2

BAROMETER 742.44 MM HG(29.23 IN HG) | DRY BULB TEMP. 24.4 DEG C(76.0 DEG F) | NOX HUMIDITY CORRECTION FACTOR .96
ELECTIVE HUMIDITY 48. PCT | ABS. HUMIDITY 9.5 GM/KG
BAG RESULTS

| TEST CYCLE | NYCC |
|---|---|
| BLOWER DIF P MM. H20(IN. H20) | 800.1 (31.5) |
| BLOWER INLET P MM. H20(IN. H20) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.9 (111.0) |
| BLOWER REVOLUTIONS | 47815. |
| TOT FLOW STD. CU. METERS(CFM) | 98.4 ( 3123.) |
| THC SAMPLE METER/RANGE/PPM | 29.5/ 3/ 29. |
| THC BOXED METER/RANGE/PPM | 19.6/ 3/ 19. |
| CO SAMPLE METER/RANGE/PPM | 44.3/ 12/ 44. |
| CO BOXED METER/RANGE/PPM | .5/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 75.5/ 14/ .5392 |
| CO2 BOXED METER/RANGE/PCT | 13.0/ 14/ .0436 |
| NOX SAMPLE METER/RANGE/PPM | 1.4/ 1/ .4 |
| NOX BOXED METER/RANGE/PPM | .5/ 1/ .1 |
| DILUTION FACTOR | 22.74 |
| THC CONCENTRATION PPM | 11. |
| CO CONCENTRATION PPM | 42. |
| CO2 CONCENTRATION PCT | .5404 |
| NOX CONCENTRATION PPM | .2 |
| THC MASS GRAMS | .54 |
| CO MASS GRAMS | 4.32 |
| CO2 MASS GRAMS | 875.3 |
| NOX MASS GRAMS | .04 |
| RUN TIME SECONDS | 599. |
| DFC, WET (DRY) | .956 ( .941) |
| DCF, WET (DRY) | 1.000 ( .979) |
| VOL (SCM) | 88.4 |
| SAM FLR (SCM) | .00 |
| KI (MEASURED) | 1.13 |
| TEST NUMBER, | B1CDCC-82 |
| BAROMETER, MM HG | 742.4 |
| HUMIDITY, G/KG | 9.5 |
| TEMPERATURE, DEG C | 24.4 |
| CARBON DIOXIDE, G/MI | 742.7 |
| FUEL ECONOMY, MPG | 11.9 |
| HYDROCARBONS, (THC) G/MI | .45 |
| CARBON MONOXIDE, G/MI | 3.55 |
| OXIDES OF NITROGEN, G/MI | .33 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1CJM4-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO. 934
DATE 5/31/90
BAG CART NO. 2 / CVS NO. 3
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3063. KM( 1903. MILES)

BAROMETER 737.11 MM HG(29.02 IN HG)
RELATIVE HUMIDITY 63. PCT

DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 12.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.06

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 41.7 (107.0) | 42.2 (108.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40347. | 69397. | 40326. | 69400. |
| TOT FLOW STD. CU. METRES(SCF) | 74.6 ( 2634.) | 128.6 ( 4540.) | 74.6 ( 2635.) | 128.7 ( 4545.) |
| THC SAMPLE METER/RANGE/PPM | 78.5/ 2/ 78. | 14.4/ 2/ 14. | 28.6/ 2/ 28. | 13.0/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | 14.5/ 2/ 14. | 15.3/ 2/ 15. | 12.9/ 2/ 13. | 13.2/ 2/ 13. |
| CO SAMPLE METER/RANGE/PPM | 47.4/ 13/ 111. | 1.4/ 12/ 1. | 9.6/ 12/ 9. | 5.1/ 12/ 5. |
| CO BCKGRD METER/RANGE/PPM | .9/ 13/ 2. | 1.4/ 12/ 1. | .8/ 12/ 1. | .5/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 58.1/ 1/1.0662 | 83.6/ 14/ .7271 | 94.1/ 14/ .9726 | 82.1/ 14/ .6979 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0441 | 12.9/ 14/ .0434 | 13.2/ 14/ .0446 | 13.1/ 14/ .0442 |
| NOX SAMPLE METER/RANGE/PPM | 32.1/ 1/ 8.1 | 6.8/ 1/ 1.8 | 14.5/ 1/ 3.7 | 4.4/ 1/ 1.2 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 1/ .0 | .0/ 1/ .0 | .1/ 1/ .0 | .2/ 1/ .1 |
| DILUTION FACTOR | 12.36 | 18.39 | 13.73 | 19.15 |
| THC CONCENTRATION PPM | 64. | 0. | 16. | 0. |
| CO CONCENTRATION PPM | 104. | 0. | 8. | 4. |
| CO2 CONCENTRATION PCT | 1.0257 | .6861 | .9312 | .6560 |
| NOX CONCENTRATION PPM | 8.1 | 1.8 | 3.7 | 1.1 |
| THC MASS GRAMS | 2.77 | .00 | .71 | .04 |
| CO MASS GRAMS | 9.05 | .01 | .71 | .64 |
| CO2 MASS GRAMS | 1400.9 | 1615.0 | 1272.5 | 1545.8 |
| NOX MASS GRAMS | 1.22 | .46 | .56 | .29 |
| THC GRAMS/MI | .77 | .00 | .20 | .01 |
| CO GRAMS/MI | 2.51 | .00 | .20 | .17 |
| CO2 GRAMS/MI | 388.2 | 419.4 | 355.4 | 401.0 |
| NOX GRAMS/MI | .34 | .12 | .16 | .07 |
| FUEL ECONOMY IN MPG | 22.48 | 21.77 21.14 | 24.89 | 23.36 22.10 |
| RUN TIME SECONDS | 504. | 868. | 504. | 868. |
| MEASURED DISTANCE MI | 3.61 | 7.46 3.85 | 3.58 | 7.44 3.85 |
| SCF, DRY | .970 | .972 .973 | .971 | .972 .973 |
| DFC, WET (DRY) | | .936( .917) | | .940( .921) |
| TOT VOL (SCM) / SAM BLR (SCM) | | 283.2/ .00 | | 283.3/ .00 |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1CJM4-01 |
| BAROMETER | MM HG | 737.1 |
| HUMIDITY | G/KG | 12.5 |
| TEMPERATURE | DEG C | 24.4 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 395.3 | ( 389.9) |
| FUEL ECONOMY | MPG | 22.34 | ( 22.65) |
| HYDROCARBONS (THC) | G/MI | .21 | ( .22) |
| CARBON MONOXIDE | G/MI | .58 | ( .63) |
| OXIDES OF NITROGEN | G/MI | .18 | ( .16) |

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1CJM4-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 736.35 MM HG(28.99 IN HG)
RELATIVE HUMIDITY 56. PCT

VEHICLE NO.934
DATE 5/31/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.8 DEG F)
ABS. HUMIDITY 11.0 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3085. KM( 1917. MILES)

NOX HUMIDITY CORRECTION FACTOR 1.01

BAG RESULTS

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 774.7 (30.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 774.7 (30.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 61163. |
| TOT FLOW STD. CU. METRES(SCF) | 112.7 ( 3981.) |
| THC SAMPLE METER/RANGE/PPM | 13.7/ 2/ 14. |
| THC BCKGRD METER/RANGE/PPM | 11.9/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 11.6/ 12/ 11. |
| CO BCKGRD METER/RANGE/PPM | .7/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 73.7/ 1/1.3593 |
| CO2 BCKGRD METER/RANGE/PCT | 2.8/ 1/ .0494 |
| NOX SAMPLE METER/RANGE/PPM | 37.6/ 1/ 9.5 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 |
| DILUTION FACTOR | 9.84 |
| THC CONCENTRATION PPM | 3. |
| CO CONCENTRATION PPM | 10. |
| CO2 CONCENTRATION PCT | 1.3149 |
| NOX CONCENTRATION PPM | 9.3 |
| THC MASS GRAMS | .19 |
| CO MASS GRAMS | 1.32 |
| CO2 MASS GRAMS | 2714.2 |
| NOX MASS GRAMS | 2.03 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .898 ( .882) |
| SCF, WET (DRY) | 1.000 ( .969) |
| VOL (SCM) | 112.7 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.26 |
| TEST NUMBER, | B1CJM4-01 |
| BAROMETER, MM HG | 736.3 |
| HUMIDITY, G/KG | 11.0 |
| TEMPERATURE, DEG C | 24.4 |
| CARBON DIOXIDE, G/MI | 264.6 |
| FUEL ECONOMY, MPG | 33.5 |
| HYDROCARBONS. (THC) G/MI | .02 |
| CARBON MONOXIDE, G/MI | .13 |
| OXIDES OF NITROGEN, G/MI | .20 |

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. 81CJM4-01 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 736.09 MM HG(28.98 IN HG)
RELATIVE HUMIDITY 58. PCT

VEHICLE NO.934
DATE 5/31/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.8 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3101. KM( 1927. MILES)

NOX HUMIDITY CORRECTION FACTOR 1.00

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 47777. |
| TOT FLOW STD. CU. METRES(SCF) | | 88.3 ( 3117.) |
| THC SAMPLE METER/RANGE/PPM | | 30.7/ 2/ 30. |
| THC BCKGRD METER/RANGE/PPM | | 16.2/ 2/ 16. |
| CO SAMPLE METER/RANGE/PPM | | 47.9/ 13/ 112. |
| CO BCKGRD METER/RANGE/PPM | | .5/ 13/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 75.6/ 14/ .5838 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.7/ 14/ .0466 |
| NOX SAMPLE METER/RANGE/PPM | | 5.4/ 1/ 1.4 |
| NOX BCKGRD METER/RANGE/PPM | | .4/ 1/ .1 |
| DILUTION FACTOR | | 22.42 |
| THC CONCENTRATION PPM | | 15. |
| CO CONCENTRATION PPM | | 107. |
| CO2 CONCENTRATION PCT | | .5393 |
| NOX CONCENTRATION PPM | | 1.3 |
| THC MASS GRAMS | | .77 |
| CO MASS GRAMS | | 11.04 |
| CO2 MASS GRAMS | | 871.8 |
| NOX MASS GRAMS | | .22 |
| RUN TIME | SECONDS | 598. |
| DFC, WET (DRY) | | .955 ( .937) |
| SCF, WET (DRY) | | 1.000 ( .976) |
| VOL (SCM) | | 88.3 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.19 |
| TEST NUMBER, | | 81CJM4-01 |
| BAROMETER, | MM HG | 736.1 |
| HUMIDITY, | G/KG | 10.8 |
| TEMPERATURE, | DEG C | 23.3 |
| CARBON DIOXIDE, | G/MI | 735.4 |
| FUEL ECONOMY, | MPG | 11.8 |
| HYDROCARBONS, (THC) | G/MI | .65 |
| CARBON MONOXIDE, | G/MI | 9.31 |
| OXIDES OF NITROGEN, | G/MI | .19 |

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PROJECT 08-2346-001

EST NO. B1CJM4-02 RUN 1
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 737.36 MM HG(29.03 IN HG)
ELATIVE HUMIDITY 58. PCT
AG RESULTS

VEHICLE NO.934
DATE 6/ 1/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 10.3 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3104. KM( 1929. MILES)

NOX HUMIDITY CORRECTION FACTOR .99

| | 1 COLD TRANSIENT | 2 STABILIZED | 3 HOT TRANSIENT | 4 STABILIZED |
|---|---|---|---|---|
| BAG NUMBER | | | | |
| DESCRIPTION | | | | |
| BLOWER DIF P MM. H20(IN. H20) | 774.7 (30.5) | 774.7 (30.5) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H20(IN. H20) | 762.0 (30.0) | 774.7 (30.5) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 39.4 (103.0) | 42.2 (108.0) | 39.4 (103.0) |
| BLOWER REVOLUTIONS | 40367. | 69586. | 40353. | 69485. |
| TOT FLOW STD. CU. METRES(SCF) | 74.6 ( 2636.) | 129.1 ( 4560.) | 74.7 ( 2638.) | 129.2 ( 4562.) |
| THC SAMPLE METER/RANGE/PPM | 9.2/ 3/ 92. | 11.6/ 2/ 11. | 21.3/ 2/ 21. | 12.0/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 1.3/ 3/ 13. | 11.7/ 2/ 12. | 10.9/ 2/ 11. | 12.6/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 68.4/ 13/ 164. | .8/ 12/ 1. | 3.5/ 12/ 3. | 1.3/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .6/ 13/ 1. | .8/ 12/ 1. | .5/ 12/ 0. | .5/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 57.6/ 1/1.0568 | 83.3/ 14/ .7212 | 94.2/ 14/ .9753 | 82.0/ 14/ .6960 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 13.2/ 14/ .0446 | 12.7/ 14/ .0426 | 12.7/ 14/ .0426 |
| NOX SAMPLE METER/RANGE/PPM | 22.8/ 1/ 5.8 | 4.7/ 1/ 1.2 | 16.5/ 1/ 4.2 | 3.1/ 1/ .8 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 | 3.7/ 1/ 1.0 | .5/ 1/ .1 | .0/ 1/ .0 |
| DILUTION FACTOR | 12.39 | 18.55 | 13.71 | 19.22 |
| THC CONCENTRATION PPM | 80. | 1. | 11. | 0. |
| CO CONCENTRATION PPM | 156. | 0. | 3. | 1. |
| CO2 CONCENTRATION PCT | 1.0130 | .6790 | .9358 | .6555 |
| NOX CONCENTRATION PPM | 5.7 | .3 | 4.1 | .8 |
| THC MASS GRAMS | 3.44 | .04 | .48 | .00 |
| CO MASS GRAMS | 13.55 | .00 | .24 | .11 |
| CO2 MASS GRAMS | 1384.5 | 1605.3 | 1288.2 | 1550.5 |
| NOX MASS GRAMS | .81 | .00 | .58 | .20 |
| THC GRAMS/MI | .95 | .01 | .13 | .00 |
| CO GRAMS/MI | 3.73 | .00 | .07 | .03 |
| CO2 GRAMS/MI | 381.0 | 417.9 | 357.5 | 402.9 |
| NOX GRAMS/MI | .22 | .02 | .16 | .05 |
| FUEL ECONOMY IN MPG | 22.75 21.94 | 21.22 | 24.77 23.26 | 22.01 |
| RUN TIME SECONDS | 503. | 868. | 504. | 867. |
| MEASURED DISTANCE MI | 3.63 7.48 | 3.84 | 3.58 7.43 | 3.85 |
| SCF, DRY | .972 .974 | .975 | .972 .974 | .975 |
| DFC, WET (DRY) | .936( .919) | | .948( .923) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 283.8/ .00 | | 283.9/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1CJM4-02 |
| BAROMETER | MM HG | 737.4 |
| HUMIDITY | G/KG | 10.3 |
| TEMPERATURE | DEG C | 22.8 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 393.6 | ( 389.2) |
| FUEL ECONOMY | MPG | 22.42 | ( 22.67) |
| HYDROCARBONS (THC) | G/MI | .24 | ( .24) |
| CARBON MONOXIDE | G/MI | .80 | ( .81) |
| OXIDES OF NITROGEN | G/MI | .10 | ( .11) |

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HFET - VEHICLE EMISSIONS RESULTS -
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| | | |
|---|---|---|
| EST NO. B1CJM4-02 RUN 1 | VEHICLE NO.934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| EHICLE MODEL 89 CORSICA | DATE 6/ 1/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| NGINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-995-F |
| RANSMISSION A3 | DYNO NO. 3 | ODOMETER 3127. KM( 1943. MILES) |
| | CVS NO. 2 | |
| AROMETER 736.60 MM HG(29.00 IN HG) | DRY BULB TEMP. 23.9 DEG C(75.0 DEG F) | |
| ELATIVE HUMIDITY 55. PCT | ABS. HUMIDITY 10.5 GM/KG | NOX HUMIDITY CORRECTION FACTOR .99 |

AG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 774.7 (30.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61207. |
| TOT FLOW STD. CU. METRES(SCF) | | 113.3 ( 3999.) |
| THC SAMPLE METER/RANGE/PPM | | 12.1/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | | 12.3/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | | 7.9/ 12/ 8. |
| CO BCKGRD METER/RANGE/PPM | | .9/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 72.3/ 1/1.3328 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.4/ 1/ .0423 |
| NOX SAMPLE METER/RANGE/PPM | | 38.1/ 1/ 9.6 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 1/ .0 |
| DILUTION FACTOR | | 10.04 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 6. |
| CO2 CONCENTRATION PCT | | 1.2947 |
| NOX CONCENTRATION PPM | | 9.6 |
| THC MASS GRAMS | | .07 |
| CO MASS GRAMS | | .86 |
| CO2 MASS GRAMS | | 2684.8 |
| NOX MASS GRAMS | | 2.06 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .900 ( .884) |
| DCF, WET (DRY) | | 1.000 ( .970) |
| VOL (SCM) | | 113.3 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.15 |
| TEST NUMBER, | | B1CJM4-02 |
| BAROMETER, | MM HG | 736.6 |
| HUMIDITY. | G/KG | 10.5 |
| TEMPERATURE. | DEG C | 23.9 |
| CARBON DIOXIDE, | G/MI | 264.4 |
| FUEL ECONOMY, | MPG | 33.5 |
| HYDROCARBONS. (THC) | G/MI | .01 |
| CARBON MONOXIDE, | G/MI | .08 |
| OXIDES OF NITROGEN, | G/MI | .20 |

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. 31CJM4-02 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 736.60 MM HG(29.00 IN HG)
RELATIVE HUMIDITY 55. PCT
BAG RESULTS

VEHICLE NO.934
DATE 6/ 1/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 10.5 GM/KG

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-995-F
ODOMETER 3143. KM( 1953. MILES)

NOX HUMIDITY CORRECTION FACTOR .99

| | |
|---|---|
| TEST CYCLE | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 47814. |
| TOT FLOW STD. CU. METRES(SCF) | 88.5 ( 3126.) |
| THC SAMPLE METER/RANGE/PPM | 35.0/ 2/ 35. |
| THC BCKGRD METER/RANGE/PPM | 19.0/ 2/ 19. |
| CO SAMPLE METER/RANGE/PPM | 67.5/ 13/ 161. |
| CO BCKGRD METER/RANGE/PPM | .7/ 13/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 74.7/ 14/ .5695 |
| CO2 BCKGRD METER/RANGE/PCT | 12.8/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | 3.9/ 1/ 1.0 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 1/ .0 |
| DILUTION FACTOR | 22.77 |
| THC CONCENTRATION PPM | 17. |
| CO CONCENTRATION PPM | 155. |
| CO2 CONCENTRATION PCT | .5284 |
| NOX CONCENTRATION PPM | 1.0 |
| THC MASS GRAMS | .85 |
| CO MASS GRAMS | 15.98 |
| CO2 MASS GRAMS | 856.3 |
| NOX MASS GRAMS | .17 |
| RUN TIME SECONDS | 598. |
| DFC, WET (DRY) | .956 ( .939) |
| SCF, WET (DRY) | 1.000 ( .977) |
| VOL (SCM) | 88.5 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.16 |
| TEST NUMBER. | B1CJM4-02 |
| BAROMETER. MM HG | 736.6 |
| HUMIDITY. G/KG | 10.5 |
| TEMPERATURE, DEG C | 23.9 |
| CARBON DIOXIDE. G/MI | 741.3 |
| FUEL ECONOMY. MPG | 11.6 |
| HYDROCARBONS. (THC) G/MI | .74 |
| CARBON MONOXIDE, G/MI | 13.84 |
| OXIDES OF NITROGEN. G/MI | .15 |

## APPENDIX H

## COMPUTER PRINTOUTS OF CHEVROLET CORSICA AIR INJECTION EXPERIMENT RESULTS

| Page H- | Test No. | Fuel | Catalyst | Test Cycle |
|---|---|---|---|---|
| 2 | B2CHCC-04A | M85 | HC+Air1/3 | FTP |
| 3 | B1CHCU-01A | Howell EEE | HC+Air1/3 | FTP |
| 4 | HCA85/10 | Howell EEE | HC+Air1 | FTP |
| 5 | HCA100/10 | Howell EEE | HC+Air1 | FTP |
| 6 | B2CHCRF1 | M85 | HC+AIR1/3 | FTP |
| 7 | B2CHCC-08A | M85 | HC+AIR1/3 | FTP |

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TEST NO. 32CHCU-04A RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 7/13/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
M85 EM-998-F
ODOMETER 3293. KM( 2046. MILES)

BAROMETER 743.97 MM HG(29.29 IN HG)
RELATIVE HUMIDITY 61. PCT

DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 10.4 GM/KG

NOX HUMIDITY CORRECTION FACTOR .99

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 767.1 (30.2) | 767.1 (30.2) | 767.1 (30.2) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 764.5 (30.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 41.1 (106.0) | 41.7 (107.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40486. | 69486. | 40410. | 69379. |
| TOT FLOW STD. CU. METRES(SCF) | 75.6 ( 2668.) | 130.2 ( 4597.) | 75.6 ( 2671.) | 129.9 ( 4588.) |
| THC SAMPLE METER/RANGE/PPM | 19.5/ 2/ 19. | 8.2/ 2/ 8. | 12.5/ 2/ 12. | 10.2/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 8.1/ 2/ 8. | 8.5/ 2/ 8. | 10.7/ 2/ 11. | 10.5/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | 32.0/ 12/ 31. | 1.6/ 12/ 2. | 14.1/ 12/ 14. | 3.9/ 12/ 4. |
| CO BCKGRD METER/RANGE/PPM | .4/ 12/ 0. | .4/ 12/ 0. | .5/ 12/ 0. | .6/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 56.5/ 1/1.0363 | 88.2/ 14/ .6625 | 91.2/ 14/ .8965 | 79.5/ 14/ .6499 |
| CO2 BCKGRD METER/RANGE/PCT | 2.4/ 1/ .0423 | 12.4/ 14/ .0415 | 12.5/ 14/ .0418 | 12.5/ 14/ .0418 |
| NOX SAMPLE METER/RANGE/PPM | 37.5/ 1/ 9.4 | 5.7/ 1/ 1.5 | 20.9/ 1/ 5.3 | 3.2/ 1/ .8 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 1/ .1 | .2/ 1/ .1 | .6/ 1/ .2 | .3/ 1/ .1 |
| DILUTION FACTOR | 11.56 | 18.14 | 13.39 | 18.48 |
| THC CONCENTRATION PPM | 12. | 0. | 3. | 0. |
| CO CONCENTRATION PPM | 29. | 1. | 13. | 3. |
| CO2 CONCENTRATION PCT | .9976 | .6233 | .8578 | .6183 |
| NOX CONCENTRATION PPM | 9.3 | 1.4 | 5.2 | .8 |
| THC MASS GRAMS | 1.02 | .02 | .22 | .04 |
| CO MASS GRAMS | 2.59 | .17 | 1.11 | .46 |
| CO2 MASS GRAMS | 1388.2 | 1485.7 | 1187.8 | 1452.0 |
| NOX MASS GRAMS | 1.34 | .36 | .74 | .19 |
| THC GRAMS/MI | .28 | .01 | .06 | .01 |
| CO GRAMS/MI | .72 | .04 | .31 | .12 |
| CO2 GRAMS/MI | 382.7 | 384.5 | 330.9 | 373.8 |
| NOX GRAMS/MI | .37 | .09 | .21 | .05 |
| FUEL ECONOMY IN MPG | 12.83 12.83 | 12.82 | 14.88 13.95 | 13.19 |
| RUN TIME SECONDS | 505. | 868. | 505. | 867. |
| MEASURED DISTANCE MI | 3.61 7.47 | 3.86 | 3.59 7.47 | 3.88 |
| SCF, DRY | .963 .967 | .969 | .965 .968 | .969 |
| DFC. WET (DRY) | .933( .915) | | .938( .920) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 205.8/ .00 | | 205.6/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | 32CHCU-04A |
| BAROMETER | MM HG | 744.0 |
| HUMIDITY | G/KG | 10.4 |
| TEMPERATURE | DEG C | 22.2 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 369.4 | ( 366.3) |
| FUEL ECONOMY | MPG | 13.33 | ( 13.44) |
| HYDROCARBONS (THC) | G/MI | .08 | ( .08) |
| CARBON MONOXIDE | G/MI | .26 | ( .28) |
| OXIDES OF NITROGEN | G/MI | .18 | ( .17) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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TEST NO. 81CHCU-01A RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 3.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO. 934
DATE 7/27/90
BAG CART NO. 3 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-1035-F
ODOMETER 3335. KM( 3072. MILES)

BAROMETER 741.17 MM HG(29.18 IN HG)
RELATIVE HUMIDITY 57. PCT
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 9.8 GM/KG
NOX HUMIDITY CORRECTION FACTOR .97

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 40.6 (105.0) | 39.4 (103.0) | 41.1 (106.0) | 38.9 (102.0) |
| BLOWER REVOLUTIONS | 40451. | 69367. | 40451. | 69183. |
| TOT FLOW STD. CU. METRES(SCF) | 75.6 ( 2668.) | 129.9 ( 4585.) | 75.5 ( 2665.) | 129.5 ( 4573.) |
| THC SAMPLE METER/RANGE/PPM | 47.4/ 2/ 47. | 22.2/ 2/ 22. | 23.5/ 2/ 23. | 34.7/ 2/ 35. |
| THC BCKGRD METER/RANGE/PPM | 14.5/ 2/ 14. | 17.1/ 2/ 17. | 19.7/ 2/ 20. | 36.8/ 2/ 37. |
| CO SAMPLE METER/RANGE/PPM | 87.6/ 12/ 88. | 19.3/ 12/ 19. | 12.1/ 12/ 12. | 2.0/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .7/ 12/ 1. | 1.1/ 12/ 1. | 1.0/ 12/ 1. | .6/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 98.2/ 14/1.0940 | 83.3/ 14/ .7212 | 94.1/ 14/ .9726 | 83.0/ 14/ .7153 |
| CO2 BCKGRD METER/RANGE/PCT | 13.5/ 14/ .0458 | 13.4/ 14/ .0454 | 13.1/ 14/ .0442 | 13.0/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | 38.5/ 1/ 9.7 | 6.7/ 1/ 1.7 | 24.2/ 1/ 6.1 | 8.6/ 1/ 2.2 |
| NOX BCKGRD METER/RANGE/PPM | .6/ 1/ .2 | .4/ 1/ .1 | .4/ 1/ .1 | .8/ 1/ .2 |
| DILUTION FACTOR | 12.10 | 18.48 | 13.73 | 18.64 |
| THC CONCENTRATION PPM | 34. | 6. | 5. | 0. |
| CO CONCENTRATION PPM | 84. | 17. | 10. | 1. |
| CO2 CONCENTRATION PCT | 1.0520 | .6782 | .9316 | .6738 |
| NOX CONCENTRATION PPM | 9.5 | 1.6 | 6.0 | 2.0 |
| THC MASS GRAMS | 1.48 | .45 | .23 | .00 |
| CO MASS GRAMS | 7.36 | 2.59 | .91 | .28 |
| CO2 MASS GRAMS | 1455.5 | 1612.5 | 1287.4 | 1597.6 |
| NOX MASS GRAMS | 1.34 | .48 | .85 | .49 |
| THC GRAMS/MI | .41 | .12 | .06 | .00 |
| CO GRAMS/MI | 2.05 | .67 | .26 | .05 |
| CO2 GRAMS/MI | 404.8 | 418.5 | 361.6 | 417.1 |
| NOX GRAMS/MI | .37 | .10 | .24 | .13 |
| FUEL ECONOMY IN MPG | 21.66 | 21.38 21.12 | 24.48 | 22.78 21.26 |
| RUN TIME SECONDS | 505. | 867. | 506. | 864. |
| MEASURED DISTANCE MI | 3.60 | 7.45 3.85 | 3.56 | 7.39 3.83 |
| SCF. DRY | .971 | .974 .975 | .973 | .974 .975 |
| DFC. WET (DRY) | | .935( .918) | | .939( .922) |
| TOT VOL (ECM) / SAM BLR (SCM) | | 205.4/ .00 | | 205.0/ .00 |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | 81CHCU-01A |
| BAROMETER | MM HG | 741.2 |
| HUMIDITY | G/KG | 9.8 |
| TEMPERATURE | DEG C | 22.2 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 400.1 | ( 399.6) |
| FUEL ECONOMY | MPG | 22.06 | ( 22.11) |
| HYDROCARBONS (THC) | G/MI | .16 | ( .13) |
| CARBON MONOXIDE | G/MI | .84 | ( .66) |
| OXIDES OF NITROGEN | G/MI | .28 | ( .28) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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| | | |
|---|---|---|
| ST NO. HCA85/10 RUN 1 | VEHICLE NO. 934 | TEST WEIGHT 1417. KG( 3125. LBS) |
| VEHICLE MODEL 89 CORSICA | DATE 8/ 3/90 | ACTUAL ROAD LOAD 4.4 KW( 5.9 HP) |
| ENGINE 2.8 L(171. CID) V-6 | BAG CART NO. 2 | GASOLINE EM-1035-F |
| TRANSMISSION A3 | DYNO NO. 3 | ODOMETER 3402. KM( 2114. MILES) |
| | CVS NO. 2 | |
| BAROMETER 741.93 MM HG(29.21 IN HG) | DRY BULB TEMP. 21.1 DEG C(70.0 DEG F) | |
| RELATIVE HUMIDITY 68. PCT | ABS. HUMIDITY 10.9 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.01 |

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 |
|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT |
| BLOWER DIF P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 40.6 (105.0) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 40544. | 69494. | 40395. |
| TOT FLOW STD. CU. METRES(SCF) | 75.4 ( 2664.) | 130.0 ( 4589.) | 75.3 ( 2659.) |
| THC SAMPLE METER/RANGE/PPM | 44.9/ 2/ 45. | 20.9/ 2/ 21. | 25.2/ 2/ 25. |
| THC BCKGRD METER/RANGE/PPM | 17.8/ 2/ 18. | 22.1/ 2/ 22. | 24.6/ 2/ 25. |
| CO SAMPLE METER/RANGE/PPM | 92.5/ 12/ 93. | 1.9/ 12/ 2. | 8.1/ 12/ 8. |
| CO BCKGRD METER/RANGE/PPM | 1.2/ 12/ 1. | 1.1/ 12/ 1. | .9/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 59.4/ 1/1.0905 | 83.5/ 14/ .7251 | 94.5/ 14/ .9836 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 14.0/ 14/ .0478 | 13.6/ 14/ .0462 |
| NOX SAMPLE METER/RANGE/PPM | 30.0/ 1/ 7.6 | 5.0/ 1/ 1.3 | 18.5/ 1/ 4.7 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 | .3/ 1/ .1 | .4/ 1/ .1 |
| DILUTION FACTOR | 12.14 | 18.42 | 13.58 |
| THC CONCENTRATION PPM | 29. | 0. | 2. |
| CO CONCENTRATION PPM | 88. | 1. | 7. |
| CO2 CONCENTRATION PCT | 1.0468 | .6799 | .9409 |
| NOX CONCENTRATION PPM | 7.5 | 1.2 | 4.6 |
| THC MASS GRAMS | 1.24 | .00 | .10 |
| CO MASS GRAMS | 7.73 | .12 | .59 |
| CO2 MASS GRAMS | 1446.0 | 1617.9 | 1297.3 |
| NOX MASS GRAMS | 1.09 | .31 | .67 |
| THC GRAMS/MI | .34 | .00 | .03 |
| CO GRAMS/MI | 2.14 | .03 | .16 |
| CO2 GRAMS/MI | 399.8 | 419.3 | 360.6 |
| NOX GRAMS/MI | .30 | .08 | .19 |
| FUEL ECONOMY IN MPG | 21.94 | 21.15 | 24.57 |
| RUN TIME SECONDS | 506. | 868. | 505. |
| MEASURED DISTANCE MI | 3.62 | 3.86 | 3.60 |
| SCF, DRY | .968 | .971 | .969 |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | HCA85/10 |
| BAROMETER | MM HG | 741.9 |
| HUMIDITY | G/KG | 10.9 |
| TEMPERATURE | DEG C | 21.1 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 399.1 | ( .0) |
| FUEL ECONOMY | MPG | 22.16 | ( .00) |
| HYDROCARBONS (THC) | G/MI | .08 | ( .00) |
| CARBON MONOXIDE | G/MI | .58 | ( .00) |
| OXIDES OF NITROGEN | G/MI | .16 | ( .00) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. HCA100/10 RUN 1
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO. 934
DATE 8/ 8/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
GASOLINE EM-1035-F
ODOMETER 3436. KM( 2135. MILES)

BAROMETER 743.20 MM HG(29.26 IN HG)
RELATIVE HUMIDITY 53. PCT

DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 9.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR .95

BAG RESULTS

| BAG NUMBER | 1A | 1B | 2 | 3 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT 0-140 SEC | COLD TRANSIENT 140-505 SEC | STABILIZED | HOT TRANSIENT |
| BLOWER DIF P MM. H2O(IN. H2O) | 759.5 (29.9) | 762.0 (30.0) | 762.0 (30.0) | 762.0 (30.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 749.3 (29.5) | 759.5 (29.9) | 759.5 (29.9) | 759.5 (29.9) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 42.2 (108.0) | 41.1 (106.0) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 11219. | 29204. | 69351. | 40415. |
| TOT FLOW STD. CU. METRES(SCF) | 20.9 ( 740.) | 54.6 ( 1927.) | 129.8 ( 4585.) | 75.6 ( 2669.) |
| THC SAMPLE METER/RANGE/PPM | 44.6/ 2/ 45. | 19.4/ 2/ 19. | 22.6/ 2/ 23. | 26.8/ 2/ 27. |
| THC BCKGRD METER/RANGE/PPM | 15.9/ 2/ 16. | 17.0/ 2/ 17. | 22.9/ 2/ 23. | 27.3/ 2/ 27. |
| CO SAMPLE METER/RANGE/PPM | 30.6/ 12/ 30. | 19.1/ 12/ 19. | 10.0/ 12/ 10. | 11.5/ 12/ 11. |
| CO BCKGRD METER/RANGE/PPM | 1.3/ 12/ 1. | 1.5/ 12/ 1. | 1.0/ 12/ 1. | 1.3/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 94.3/ 14/ .9781 | 61.5/ 1/1.1298 | 84.0/ 14/ .7351 | 93.8/ 14/ .9643 |
| CO2 BCKGRD METER/RANGE/PCT | 13.8/ 14/ .0470 | 2.6/ 1/ .0459 | 13.8/ 14/ .0470 | 13.7/ 14/ .0466 |
| NOX SAMPLE METER/RANGE/PPM | 29.8/ 2/ 29.8 | 12.9/ 1/ 3.3 | 2.2/ 1/ .6 | 15.9/ 1/ 4.1 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 2/ .4 | 1.3/ 1/ .3 | 1.1/ 1/ .3 | .9/ 1/ .2 |
| DILUTION FACTOR | 13.60 | 11.82 | 18.15 | 13.84 |
| THC CONCENTRATION PPM | 30. | 4. | 1. | 1. |
| CO CONCENTRATION PPM | 28. | 17. | 8. | 10. |
| CO2 CONCENTRATION PCT | .9345 | 1.0878 | .6987 | .9211 |
| NOX CONCENTRATION PPM | 29.5 | 3.0 | .3 | 3.9 |
| THC MASS GRAMS | .36 | .12 | .07 | .06 |
| CO MASS GRAMS | .67 | 1.05 | 1.27 | .84 |
| CO2 MASS GRAMS | 358.4 | 1086.7 | 1641.9 | 1274.7 |
| NOX MASS GRAMS | 1.12 | .30 | .07 | .53 |
| THC GRAMS/MI | .53 | .04 | .02 | .02 |
| CO GRAMS/MI | 1.00 | .36 | .33 | .23 |
| CO2 GRAMS/MI | 528.7 | 372.8 | 424.2 | 354.6 |
| NOX GRAMS/MI | 1.65 | .10 | .02 | .15 |
| FUEL ECONOMY IN MPG | 16.67 21.98 | 23.74 | 20.88 22.67 | 24.98 |
| RUN TIME SECONDS | 140. | 365. | 867. | 505. |
| MEASURED DISTANCE MI | .68 3.59 | 2.91 | 3.87 7.47 | 3.59 |
| SCF, DRY | .974 .973 | .972 | .976 .975 | .974 |
| DFC, WET (DRY) | .918( .903) | | .939( .922) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 75.5/ .00 | | 205.4/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | HCA100/10 |
| BAROMETER | MM HG | 743.2 |
| HUMIDITY | G/KG | 9.1 |
| TEMPERATURE | DEG C | 22.2 |

| | | 3-BAG |
|---|---|---|
| CARBON DIOXIDE | G/MI | 480.6 |
| FUEL ECONOMY | MPG | 22.12 |
| HYDROCARBONS (THC) | G/MI | .04 |
| CARBON MONOXIDE | G/MI | .33 |
| OXIDES OF NITROGEN | G/MI | .13 |

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PROJECT 08- . -001

TEST NO. B2CHCRF1 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 10/ 2/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
MBS EM-1143-F
ODOMETER 3652. KM( 2269. MILES)

BAROMETER 740.66 MM HG(29.16 IN HG)
RELATIVE HUMIDITY 57. PCT

DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 9.8 GM/KG

NOX HUMIDITY CORRECTION FACTOR .97

BAG RESULTS

| BAG NUMBER | 1A | 1B | 2 | 3 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT 0-140 SEC | COLD TRANSIENT 140-505 SEC | STABILIZED | HOT TRANSIENT |
| BLOWER DIF P MM. H2O(IN. H2O) | 792.5 (31.2) | 800.1 (31.5) | 800.1 (31.5) | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | 789.9 (31.1) | 795.0 (31.3) | 795.0 (31.3) | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 41.7 (107.0) | 40.0 (104.0) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 11222. | 29257. | 69464. | 40487. |
| TOT FLOW STD. CU. METRES(SCF) | 20.8 ( 733.) | 54.2 ( 1915.) | 129.2 ( 4561.) | 75.1 ( 2653.) |
| THC SAMPLE METER/RANGE/PPM | 27.3/ 2/ 27. | 12.6/ 2/ 13. | 11.0/ 2/ 11. | 10.5/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 14.7/ 2/ 15. | 13.3/ 2/ 13. | 11.6/ 2/ 12. | 9.6/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | 58.6/ 13/ 118. | 47.7/ 12/ 47. | 2.6/ 12/ 3. | 25.7/ 12/ 26. |
| CO BCKGRD METER/RANGE/PPM | .6/ 13/ 1. | 1.0/ 12/ 1. | .7/ 12/ 1. | .6/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 93.3/ 14/ .9588 | 58.8/ 1/1.0793 | 80.9/ 14/ .6753 | 92.0/ 14/ .9168 |
| CO2 BCKGRD METER/RANGE/PCT | 14.3/ 14/ .0490 | 2.8/ 1/ .0494 | 14.1/ 14/ .0482 | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | 23.7/ 2/ 23.8 | 29.2/ 1/ 7.4 | 10.0/ 1/ 2.6 | 25.7/ 1/ 6.5 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 2/ .4 | .6/ 1/ .2 | .4/ 1/ .1 | .2/ 1/ .1 |
| DILUTION FACTOR | 12.47 | 11.09 | 17.78 | 13.08 |
| THC CONCENTRATION PPM | 14. | 0. | 0. | 2. |
| CO CONCENTRATION PPM | 112. | 44. | 2. | 24. |
| CO2 CONCENTRATION PCT | .9858 | 1.0343 | .6298 | .8748 |
| NOX CONCENTRATION PPM | 23.4 | 7.2 | 2.5 | 6.5 |
| THC MASS GRAMS | .32 | .83 | .01 | .14 |
| CO MASS GRAMS | 2.71 | 2.88 | .28 | 2.18 |
| CO2 MASS GRAMS | 344.2 | 1027.0 | 1489.3 | 1283.4 |
| NOX MASS GRAMS | .90 | .73 | .68 | .98 |
| THC GRAMS/MI | .47 | .01 | .00 | .04 |
| CO GRAMS/MI | 3.98 | .96 | .07 | .59 |
| CO2 GRAMS/MI | 506.2 | 352.6 | 385.5 | 336.2 |
| NOX GRAMS/MI | 1.33 | .25 | .15 | .25 |
| FUEL ECONOMY IN MPG | 9.61 12.83 | 13.92 | 12.79 13.61 | 14.63 |
| RUN TIME SECONDS | 140. | 365. | 868. | 506. |
| MEASURED DISTANCE MI | .68 3.59 | 2.91 | 3.86 7.44 | 3.58 |
| SCF, DRY | .965 .964 | .963 | .970 .969 | .966 |
| DFC, WET (DRY) | .913( .896) | | .936( .919) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 75.0/ .00 | | 204.3/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B2CHCRF1 |
| BAROMETER | MM HG | 740.7 |
| HUMIDITY | G/KG | 9.8 |
| TEMPERATURE | DEG C | 22.2 |

| | | 3-BAG |
|---|---|---|
| CARBON DIOXIDE | G/MI | 371.2 |
| FUEL ECONOMY | MPG | 13.27 |
| HYDROCARBONS (THC) | G/MI | .83 |
| CARBON MONOXIDE | G/MI | .52 |
| OXIDES OF NITROGEN | G/MI | .24 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

FTP - VEHICLE EMISSIONS RESULTS -

PROJECT 08-3734-001

TEST NO. B2CHCC-08A RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 10/10/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1417. KG( 3125. LBS)
ACTUAL ROAD LOAD 4.4 KW( 5.9 HP)
MBS EM-1139-F
ODOMETER 3685. KM( 2290. MILES)

BAROMETER 747.78 MM HG(29.44 IN HG)
RELATIVE HUMIDITY 38. PCT
BAG RESULTS

DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 6.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR .8

| BAG NUMBER | 1A | 1B | 2 | 3 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT 0-140 SEC | COLD TRANSIENT 140-505 SEC | STABILIZED | HOT TRANSIENT |
| BLOWER DIF P MM. H2O(IN. H2O) | 795.0 (31.3) | 800.1 (31.5) | 810.3 (31.9) | 807.7 (31.8) |
| BLOWER INLET P MM. H2O(IN. H2O) | 787.4 (31.0) | 795.0 (31.3) | 800.1 (31.5) | 797.6 (31.4) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 42.8 (109.0) | 40.6 (105.0) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 11267. | 29260. | 69451. | 40369. |
| TOT FLOW STD. CU. METRES(SCF) | 21.1 ( 745.) | 54.7 ( 1932.) | 138.3 ( 4600.) | 75.6 ( 2669.) |
| THC SAMPLE METER/RANGE/PPM | 28.4/ 2/ 28. | 11.0/ 2/ 11. | 10.0/ 2/ 10. | 10.8/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | 11.0/ 2/ 11. | 18.3/ 2/ 18. | 10.4/ 2/ 10. | 10.4/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | 69.9/ 12/ 70. | 27.4/ 12/ 27. | 1.7/ 12/ 2. | 15.5/ 12/ 16. |
| CO BCKGRD METER/RANGE/PPM | .9/ 12/ 1. | .9/ 12/ 1. | .6/ 12/ 1. | .7/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 93.1/ 14/ .9455 | 57.9/ 1/1.0625 | 88.6/ 14/ .6698 | 91.6/ 14/ .90 |
| CO2 BCKGRD METER/RANGE/PCT | 13.5/ 14/ .0458 | 2.6/ 1/ .0459 | 13.5/ 14/ .0458 | 13.8/ 14/ .04 |
| NOX SAMPLE METER/RANGE/PPM | 25.3/ 2/ 25.4 | 32.4/ 1/ 8.2 | 9.6/ 1/ 2.5 | 33.6/ 1/ 8. |
| NOX BCKGRD METER/RANGE/PPM | .3/ 2/ .3 | .3/ 1/ .1 | .1/ 1/ .0 | .1/ 1/ . |
| DILUTION FACTOR | 12.61 | 11.29 | 17.94 | 13.24 |
| THC CONCENTRATION PPM | 18. | 2. | 0. | 1. |
| CO CONCENTRATION PPM | 66. | 25. | 1. | 14. |
| CO2 CONCENTRATION PCT | .9833 | 1.0206 | .6266 | .8631 |
| NOX CONCENTRATION PPM | 25.1 | 8.1 | 2.5 | 8.4 |
| THC MASS GRAMS | .24 | .18 | .03 | .18 |
| CO MASS GRAMS | 1.63 | 1.62 | .17 | 1.26 |
| CO2 MASS GRAMS | 348.8 | 1022.3 | 1494.3 | 1194.4 |
| NOX MASS GRAMS | .89 | .74 | .54 | 1.07 |
| THC GRAMS/MI | .36 | .03 | .01 | .03 |
| CO GRAMS/MI | 2.41 | .56 | .04 | .35 |
| CO2 GRAMS/MI | 515.5 | 352.9 | 389.2 | 334.8 |
| NOX GRAMS/MI | 1.31 | .26 | .14 | .30 |
| FUEL ECONOMY IN MPG | 9.49 12.00 | 13.94 | 12.67 13.57 | 14.70 |
| RUN TIME SECONDS | 141. | 365. | 867. | 505. |
| MEASURED DISTANCE MI | .68 3.57 | 2.90 | 3.04 7.41 | 3.57 |
| SCF, DRY | .972 .970 | .970 | .976 .975 | .972 |
| DFC, WET (DRY) | .914( .903) | | .937( .925) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 75.8/ .00 | | 205.8/ .00 | |

COMPOSITE RESULTS

| TEST NUMBER | | B2CHCC8A |
|---|---|---|
| BAROMETER | MM HG | 747.8 |
| HUMIDITY | G/KG | 6.5 |
| TEMPERATURE | DEG C | 22.2 |

| | | 3-BAG |
|---|---|---|
| CARBON DIOXIDE | G/MI | 373.1 |
| FUEL ECONOMY | MPG | 13.21 |
| HYDROCARBONS (THC) | G/MI | .03 |
| CARBON MONOXIDE | G/MI | .31 |
| OXIDES OF NITROGEN | G/MI | .25 |

# APPENDIX I

# HYDROCARBON SPECIATION TEST RESULTS FOR TEST NOS. B2HCRF1, B2CHCC-05A, AND B2CHCC-08A

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCRF1

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| METHANOL | 37 | 10.2 | 12.24 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 2.1 | 6.50 |
| METHANE | 99 | 27.7 | 33.28 | 30 | 7.8 | 42.23 | 54 | 15.0 | 73.49 | 13.9 | 42.87 |
| ETHYLENE | 1 | 0.4 | 0.43 | 4 | 1.0 | 5.63 | 0 | 0.0 | 0.00 | 0.6 | 1.89 |
| ETHANE | 7 | 1.9 | 2.23 | 0 | 0.0 | 0.00 | 5 | 1.3 | 6.43 | 0.7 | 2.30 |
| ACETYLENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PROPANE | 2 | 0.5 | 0.65 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.35 |
| PROPYLENE | 2 | 0.5 | 0.61 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.32 |
| 1,3-BUTADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTANE | 0 | 0.0 | 0.05 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.03 |
| BUTANE | 13 | 3.6 | 4.38 | 6 | 1.6 | 8.66 | 0 | 0.0 | 0.00 | 1.6 | 4.89 |
| 1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTYLENE | 1 | 0.2 | 0.28 | 1 | 0.2 | 1.12 | 0 | 0.0 | 0.00 | 0.2 | 0.48 |
| CIS-2-BUTENE | 0 | 0.0 | 0.02 | 0 | 0.1 | 0.36 | 0 | 0.0 | 0.00 | 0.0 | 0.12 |
| TRANS-2-BUTENE | 0 | 0.1 | 0.10 | 0 | 0.1 | 0.30 | 0 | 0.0 | 0.00 | 0.0 | 0.14 |
| BENZENE | 10 | 2.9 | 3.45 | 0 | 0.0 | 0.00 | 4 | 1.2 | 6.03 | 0.9 | 2.87 |
| TOLUENE | 11 | 3.1 | 3.72 | 0 | 0.0 | 0.00 | 1 | 0.2 | 1.02 | 0.7 | 2.15 |
| ISOPENTANE | 13 | 3.5 | 4.23 | 7 | 1.8 | 9.48 | 0 | 0.0 | 0.00 | 1.6 | 5.05 |
| 1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PENTANE | 6 | 1.8 | 2.18 | 5 | 1.4 | 7.45 | 0 | 0.0 | 0.00 | 1.1 | 3.36 |
| 2-METHYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOPRENE(2-METHYL-1,3-BUTADIENE) | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| TRANS-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CIS-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYL-2-BUTENE | 1 | 0.2 | 0.24 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.13 |
| 2,2-DIMETHYLBUTANE | 1 | 0.2 | 0.25 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.13 |
| CYCLOPENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CYCLOPENTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-METHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLBUTANE | 2 | 0.7 | 0.83 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.44 |
| 2,3-DIMETHYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYLPENTANE | 6 | 1.6 | 1.93 | 7 | 1.8 | 9.73 | 0 | 0.0 | 0.00 | 1.3 | 3.91 |
| 4-METHYL-2-PENTENE | 6 | 1.6 | 1.89 | 7 | 1.8 | 9.50 | 0 | 0.0 | 0.00 | 1.2 | 3.82 |
| MTBE | 1 | 0.3 | 0.41 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.22 |
| 3-METHYLPENTANE | 3 | 0.9 | 1.04 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.55 |
| 2-METHYL-1-PENTENE/1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| HEXANE | 3 | 0.8 | 1.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.53 |

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCRF1

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| C6 OLEFINS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4-DIMETHYLPENTANE | 2 | 0.5 | 0.62 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.33 |
| METHYLCYCLOPENTANE | 1 | 0.4 | 0.45 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.24 |
| CYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOPENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYL-1,3-PENTADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLPENTANE/2-METHYLHEXANE | 5 | 1.3 | 1.62 | 0 | 0.0 | 0.00 | 7 | 1.9 | 9.19 | 0.8 | 2.45 |
| CYCLOHEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 5-METHYL-2-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLHEXANE | 1 | 0.4 | 0.46 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.24 |
| 2,2,4-TRIMETHYLPENTANE | 10 | 2.7 | 3.24 | 0 | 0.0 | 0.00 | 1 | 0.2 | 0.79 | 0.6 | 1.86 |
| N-HEPTANE | 2 | 0.4 | 0.54 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.29 |
| 2,4,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOHEXANE | 1 | 0.3 | 0.37 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.19 |
| 2,4,4-TRIMETHYL-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4/2-5-DIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,4-TRIMETHYLPENTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,3-TRIMETHYLPENTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYL-3-HEPTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3,5,5-TRIMETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-/4-METHYLHEPTANE | 1 | 0.2 | 0.25 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.13 |
| 3-METHYLHEPTANE | 1 | 0.2 | 0.25 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.13 |
| 2,5-DIMETHYL-1,5-HEXADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-ETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1-CIS-4-DIMETHYLCYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| OCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,5/3,5-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ETHYLBENZENE | 2 | 0.5 | 0.61 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.33 |
| 2,3-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| P-XYLENE/M-XYLENE | 3 | 0.9 | 1.10 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.59 |
| 2-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCRF1

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| O-XYLENE | 2 | 0.5 | 0.61 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.33 |
| NONANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| TRANS-2-NONENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PROPYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLOCTANE | 1 | 0.2 | 0.29 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.15 |
| O-ETHYLTOLUENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1,2,4-TRIMETHYLBENZENE | 2 | 0.5 | 0.64 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.34 |
| ISOBUTYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| DECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| P-CYMENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| INDAN(E) | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-PHENYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| M-DIETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1-METHYL-3-PROPYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| N-BUTYLBENZENE/P-DIETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| O-DIETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYLDECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| BICYCLOPENTYL | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| UNDECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1,3,5-TRIMETHYLBENZENE | 1 | 0.2 | 0.27 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.14 |
| C7 OLEFINS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| C8-C9 OLEFINS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| C9-C11 PARAFFINS, OLEFINS, AROMATICS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| FORMALDEHYDE | 37 | 10.3 | 12.36 | 0 | 0.1 | 0.43 | 2 | 0.5 | 2.36 | 2.3 | 7.10 |
| ACETALDEHYDE | 3 | 0.7 | 0.90 | 4 | 0.9 | 5.11 | 1 | 0.1 | 0.68 | 0.7 | 2.11 |
| ACROLEIN | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ACETONE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PROPIONALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CROTONALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTYRALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYL ETHYL KETONE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| BENZALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| HEXANALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |

# HYDROCARBON SPECIATION FOR THE CHEVROELT CORSICA, TEST NO. B2CHCC-05A

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| METHANOL | 84.92 | 23.7 | 43.90 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 4.9 | 17.04 |
| METHANE | 85 | 23.8 | 43.98 | 35 | 9.2 | 50.55 | 67 | 18.8 | 62.41 | 14.8 | 51.40 |
| ETHYLENE | 1 | 0.3 | 0.59 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.23 |
| ETHANE | 3 | 0.8 | 1.56 | 3 | 0.9 | 5.01 | 3 | 0.7 | 2.36 | 0.8 | 2.91 |
| ACETYLENE | 0 | 0.0 | 0.00 | 2 | 0.6 | 3.04 | 0 | 0.0 | 0.00 | 0.3 | 0.99 |
| PROPANE | 4 | 1.2 | 2.13 | 6 | 1.5 | 8.01 | 5 | 1.4 | 4.72 | 1.4 | 4.78 |
| PROPYLENE | 2 | 0.6 | 1.14 | 3 | 0.8 | 4.37 | 0 | 0.0 | 0.00 | 0.5 | 1.86 |
| 1,3-BUTADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTANE | 1 | 0.2 | 0.31 | 1 | 0.4 | 2.01 | 0 | 0.1 | 0.45 | 0.3 | 0.90 |
| BUTANE | 14 | 3.9 | 7.14 | 1 | 0.3 | 1.52 | 7 | 2.0 | 6.58 | 1.5 | 5.15 |
| 1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTYLENE | 0 | 0.1 | 0.13 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.05 |
| CIS-2-BUTENE | 1 | 0.2 | 0.36 | 0 | 0.0 | 0.00 | 1 | 0.2 | 0.82 | 0.1 | 0.37 |
| TRANS-2-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| BENZENE | 9 | 2.6 | 4.81 | 1 | 0.3 | 1.92 | 3 | 0.8 | 2.74 | 0.9 | 3.27 |
| TOLUENE | 10 | 2.9 | 5.39 | 0 | 0.0 | 0.00 | 1 | 0.3 | 0.98 | 0.7 | 2.37 |
| ISOPENTANE | 5 | 1.4 | 2.55 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.3 | 0.99 |
| 1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PENTANE | 3 | 0.7 | 1.31 | 2 | 0.5 | 2.75 | 1 | 0.3 | 1.10 | 0.5 | 1.72 |
| 2-METHYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOPRENE(2-METHYL-1,3-BUTADIENE) | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| TRANS-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CIS-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYL-2-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2-DIMETHYLBUTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CYCLOPENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CYCLOPENTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-METHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLBUTANE | 1 | 0.3 | 0.59 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.23 |
| 2,3-DIMETHYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYLPENTANE | 1 | 0.4 | 0.69 | 3 | 0.9 | 4.78 | 2 | 0.7 | 2.25 | 0.7 | 2.47 |
| 4-METHYL-2-PENTENE | 1 | 0.4 | 0.67 | 3 | 0.8 | 4.67 | 2 | 0.7 | 2.20 | 0.7 | 2.41 |
| MTBE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLPENTANE | 0 | 0.1 | 0.23 | 1 | 0.3 | 1.55 | 1 | 0.2 | 0.64 | 0.2 | 0.78 |
| 2-METHYL-1-PENTENE/1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| HEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCC-05A

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| C6 OLEFINS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4-DIMETHYLPENTANE | 1 | 0.3 | 0.58 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.23 |
| METHYLCYCLOPENTANE | 0 | 0.1 | 0.23 | 1 | 0.3 | 1.52 | 0 | 0.1 | 0.22 | 0.2 | 0.64 |
| CYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOPENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYL-1,3-PENTADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLPENTANE/2-METHYLHEXANE | 5 | 1.3 | 2.47 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.3 | 0.96 |
| CYCLOHEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 5-METHYL-2-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,4-TRIMETHYLPENTANE | 17 | 4.7 | 8.76 | 0 | 0.0 | 0.00 | 8 | 2.3 | 7.50 | 1.6 | 5.55 |
| N-HEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4,4-TRIMETHYL-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4/2-5-DIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,4-TRIMETHYLPENTANE | 2 | 0.5 | 0.84 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.33 |
| 2,3,3-TRIMETHYLPENTANE | 1 | 0.3 | 0.58 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.23 |
| 2-METHYL-3-HEPTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3,5,5-TRIMETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-/4-METHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,5-DIMETHYL-1,5-HEXADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-ETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1-CIS-4-DIMETHYLCYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| OCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,5/3,5-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| P-XYLENE/M-XYLENE | 5 | 1.3 | 2.35 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.3 | 0.91 |
| 2-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCC-08A

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| 2,4-DIMETHYLPENTANE | 3 | 0.8 | 0.42 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.28 |
| METHYLCYCLOPENTANE | 1 | 0.3 | 0.19 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.12 |
| CYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOPENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYL-1,3-PENTADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLPENTANE/2-METHYLHEXANE | 8 | 2.2 | 1.20 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.5 | 0.80 |
| CYCLOHEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 5-METHYL-2-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,4-TRIMETHYLPENTANE | 16 | 4.4 | 2.39 | 0 | 0.0 | 0.00 | 6 | 1.6 | 3.62 | 1.4 | 2.36 |
| N-HEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,4-TRIMETHYL-1-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYLCYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4,4-TRIMETHYL-2-PENTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4/2-5-DIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,4-TRIMETHYLPENTANE | 4 | 1.0 | 0.55 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.37 |
| 2,3,3-TRIMETHYLPENTANE | 2 | 0.7 | 0.38 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.25 |
| 2-METHYL-3-HEPTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3,5,5-TRIMETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-/4-METHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,5-DIMETHYL-1,5-HEXADIENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,2,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-ETHYL-1-HEXENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1-CIS-4-DIMETHYLCYCLOHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| OCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3,5-TRIMETHYLHEXANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,4-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,5/3,5-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ETHYLBENZENE | 1 | 0.4 | 0.21 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.14 |
| 2,3-DIMETHYLHEPTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| P-XYLENE/M-XYLENE | 6 | 1.7 | 0.92 | 0 | 0.0 | 0.00 | 4 | 1.2 | 2.63 | 0.7 | 1.17 |
| 2-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 3-METHYLOCTANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| O-XYLENE | 2 | 0.7 | 0.37 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.25 |

# HYDROCARBON SPECIATION FOR THE CHEVROLET CORSICA, TEST NO. B2CHCC-08A

| COMPOUND | BAG 1 | | | BAG 2 | | | BAG 3 | | | FTP TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG | MG/MI | WGT. % | MG/MI | WGT. % |
| NONANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| TRANS-2-NONENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| PROPYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2,3-DIMETHYLOCTANE | 1 | 0.3 | 0.15 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.10 |
| O-ETHYLTOLUENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1,2,4-TRIMETHYLBENZENE | 4 | 1.2 | 0.67 | 0 | 0.0 | 0.00 | 1 | 0.3 | 0.69 | 0.3 | 0.59 |
| ISOBUTYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| DECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| P-CYMENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| INDAN(E) | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 4-PHENYL-1-BUTENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| M-DIETHYLBENZENE | 3 | 0.7 | 0.39 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.2 | 0.26 |
| 1-METHYL-3-PROPYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| N-BUTYLBENZENE/P-DIETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| O-DIETHYLBENZENE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 2-METHYLDECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| BICYCLOPENTYL | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| UNDECANE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| 1,3,5-TRIMETHYLBENZENE | 2 | 0.4 | 0.23 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.15 |
| C7 OLEFINS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| C8-C9 OLEFINS | 1 | 0.3 | 0.15 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.1 | 0.10 |
| C9-C11 PARAFFINS, OLEFINS, AROMATICS | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| FORMALDEHYDE | 61 | 17.1 | 9.32 | 5 | 1.4 | 10.53 | 3 | 0.7 | 1.59 | 4.5 | 7.82 |
| ACETALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ACROLEIN | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ACETONE | 2 | 0.6 | 0.31 | 2 | 0.5 | 3.71 | 1 | 0.2 | 0.36 | 0.4 | 0.73 |
| PROPIONALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| CROTONALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| ISOBUTYRALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| METHYL ETHYL KETONE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| BENZALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |
| HEXANALDEHYDE | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0 | 0.0 | 0.00 | 0.0 | 0.00 |

# APPENDIX J

## COMPUTER PRINTOUTS OF TASK 2 CROWN VICTORIA #1 EMISSION TEST RESULTS

| Page J- | Test No. | Fuel | Catalyst | Test Cycle |
|---|---|---|---|---|
| 2 | B2FBL-01 | M85 | OEM | FTP |
| 3 | B2FBL-01 | M85 | OEM | HFET |
| 4 | B2FBL-01 | M85 | OEM | NYCC |
| 5 | B2FJM1-02 | M85 | JM | FTP |
| 6 | B2FJM1-02 | M85 | JM | HFET |
| 7 | B2FJM1-02 | M85 | JM | NYCC |
| 8 | B2FJM1-03 | M85 | JM | FTP |
| 9 | B2FJM1-03 | M85 | JM | HFET |
| 10 | B2FJM1-03 | M85 | JM | NYCC |
| 11 | B2FD-01 | M85 | Degussa | FTP |
| 12 | B2FD-01 | M85 | Degussa | HFET |
| 13 | B2FD-01 | M85 | Degussa | NYC |
| 14 | B2FD-02 | M85 | Degussa | FTP |
| 15 | B2FD-02 | M85 | Degussa | HFET |
| 16 | B2FD-02 | M85 | Degussa | NYCC |
| 17 | B2FHC-01 | M85 | Camet | FTP |
| 18 | B2FHC-01 | M85 | Camet | HFET |
| 19 | B2FHC-01 | M85 | Camet | NYCC |
| 20 | B2FHC-02 | M85 | Camet | FTP |
| 21 | B2FHC-02 | M85 | Camet | HFET |
| 22 | B2FHC-02 | M85 | Camet | NYCC |
| 23 | B2FBL1-01 | Howell EEE | OEM | FTP |
| 24 | B2FBL1-01 | Howell EEE | OEM | HFET |
| 25 | B2FBL1-01 | Howell EEE | OEM | NYCC |
| 26 | B1FJM-01 | Howell EEE | JM | FTP |
| 27 | B1FJM-01 | Howell EEE | JM | HFET |
| 28 | B1FJM-01 | Howell EEE | JM | NYCC |
| 29 | B1FJM1-03 | Howell EEE | JM | FTP |
| 30 | B1FJM1-03 | Howell EEE | JM | HFET |
| 31 | B1FJM1-03 | Howell EEE | JM | NYCC |
| 32 | B1FD-01 | Howell EEE | Degussa | FTP |
| 33 | B1FD-01 | Howell EEE | Degussa | HFET |
| 34 | B1FD-01 | Howell EEE | Degussa | NYCC |
| 35 | B1FD-02 | Howell EEE | Degussa | FTP |
| 36 | B1FD-02 | Howell EEE | Degussa | HFET |
| 37 | B1FD-02 | Howell EEE | Degussa | NYCC |
| 38 | B1FHC-01 | Howell EEE | Camet | FTP |
| 39 | B1FHC-01 | Howell EEE | Camet | HFET |
| 40 | B1FHC-01 | Howell EEE | Camet | NYC |
| 41 | B1FHC-02 | Howell EEE | Camet | FTP |
| 42 | B1FHC-02 | Howell EEE | Camet | HFET |
| 43 | B1FHC-02 | Howell EEE | Camet | NYCC |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 1/ 8/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 747.78 MM HG(29.44 IN HG)
RELATIVE HUMIDITY 32. PCT
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 6.2 GM/KG
NOX HUMIDITY CORRECTION FACTOR .87

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) |
| BLOWER INLET P MM. H2O(IN. H2O) | 795.0 (31.3) | 789.9 (31.1) | 789.9 (31.1) | 789.9 (31.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) | 41.7 (107.0) | 42.2 (108.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40508. | 69445. | 40470. | 69421. |
| TOT FLOW STD. CU. METRES(SCF) | 75.7 ( 2672.) | 130.2 ( 4597.) | 75.8 ( 2676.) | 130.3 ( 4600.) |
| THC SAMPLE METER/RANGE/PPM | 31.5/ 2/ 31. | 9.0/ 2/ 9. | 9.6/ 2/ 10. | 8.9/ 2/ 9. |
| THC BCKGRD METER/RANGE/PPM | 9.6/ 2/ 10. | 8.2/ 2/ 8. | 7.1/ 2/ 7. | 7.5/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | 62.1/ 13/ 147. | .4/ 12/ 0. | .9/ 12/ 1. | .3/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .0/ 13/ 0. | .3/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 73.0/ 1/1.3468 | 88.9/ 14/ .8411 | 62.1/ 1/1.1411 | 87.9/ 14/ .8182 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 13.4/ 14/ .0454 | 2.6/ 1/ .0459 | 13.2/ 14/ .0446 |
| NOX SAMPLE METER/RANGE/PPM | 86.9/ 1/ 21.7 | 38.0/ 1/ 7.6 | 68.8/ 1/ 17.2 | 28.7/ 1/ 7.3 |
| NOX BCKGRD METER/RANGE/PPM | .9/ 1/ .2 | .9/ 1/ .2 | .5/ 1/ .1 | .7/ 1/ .2 |
| DILUTION FACTOR | 8.83 | 14.29 | 10.54 | 14.69 |
| THC CONCENTRATION PPM | 23. | 1. | 3. | 2. |
| CO CONCENTRATION PPM | 140. | 0. | 1. | 0. |
| CO2 CONCENTRATION PCT | 1.3838 | .7989 | 1.0995 | .7766 |
| NOX CONCENTRATION PPM | 21.5 | 7.4 | 17.1 | 7.1 |
| THC MASS GRAMS | 1.93 | .20 | .27 | .28 |
| CO MASS GRAMS | 12.38 | .02 | .08 | .04 |
| CO2 MASS GRAMS | 1806.2 | 1904.2 | 1525.9 | 1852.4 |
| NOX MASS GRAMS | 2.71 | 1.59 | 2.16 | 1.54 |
| THC GRAMS/MI | .53 | .05 | .07 | .07 |
| CO GRAMS/MI | 3.42 | .00 | .02 | .01 |
| CO2 GRAMS/MI | 499.8 | 489.2 | 423.8 | 474.5 |
| NOX GRAMS/MI | .75 | .41 | .60 | .39 |
| FUEL ECONOMY IN MPG | 9.75 9.91 | 10.08 | 11.63 10.95 | 10.39 |
| RUN TIME SECONDS | 585. | 867. | 585. | 867. |
| MEASURED DISTANCE MI | 3.61 7.51 | 3.89 | 3.60 7.50 | 3.90 |
| SCF, DRY | .967 .972 | .975 | .970 .974 | .976 |
| DFC, WET (DRY) | .914( .905) | | .922( .913) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 285.9/ .00 | | 286.1/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | B2FBL1-01 | CARBON DIOXIDE | G/MI | 473.5 ( 469.2) |
| BAROMETER | MM HG 747.8 | FUEL ECONOMY | MPG | 10.38 ( 10.48) |
| HUMIDITY | G/KG 6.2 | HYDROCARBONS (THC) | G/MI | .16 ( .16) |
| TEMPERATURE | DEG C 24.4 | CARBON MONOXIDE | G/MI | .72 ( .72) |
| | | OXIDES OF NITROGEN | G/MI | .53 ( .53) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 747.01 MM HG(29.41 IN HG)
RELATIVE HUMIDITY 27. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 5.3 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .85

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 810.3 (31.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 61238. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.4 ( 4038.) |
| THC SAMPLE METER/RANGE/PPM | | 8.5/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | | 7.0/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | .3/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 83.1/ 1/1.5380 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.5/ 1/ .0441 |
| NOX SAMPLE METER/RANGE/PPM | | 73.7/ 1/ 18.5 |
| NOX BCKGRD METER/RANGE/PPM | | .2/ 1/ .1 |
| DILUTION FACTOR | | 7.82 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.4995 |
| NOX CONCENTRATION PPM | | 18.4 |
| THC MASS GRAMS | | .30 |
| CO MASS GRAMS | | .04 |
| CO2 MASS GRAMS | | 3139.8 |
| NOX MASS GRAMS | | 3.43 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .872 ( .865) |
| SCF, WET (DRY) | | 1.000 ( .965) |
| VOL (SCM) | | 114.4 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.26 |
| TEST NUMBER, | | B2FBL1-01 |
| BAROMETER, | MM HG | 747.0 |
| HUMIDITY, | G/KG | 5.3 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 306.0 |
| FUEL ECONOMY, | MPG | 16.1 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .33 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 27. PCT

VEHICLE NO.95
DATE 1/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 5.4 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .85

BAG RESULTS

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 795.0 (31.3) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 47786. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.5 ( 3159.) |
| THC SAMPLE METER/RANGE/PPM | | 10.7/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | | 7.0/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | 2.2/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 83.5/ 14/ .7251 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.0/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | | 37.2/ 1/ 9.4 |
| NOX BCKGRD METER/RANGE/PPM | | .4/ 1/ .1 |
| DILUTION FACTOR | | 16.57 |
| THC CONCENTRATION PPM | | 4. |
| CO CONCENTRATION PPM | | 2. |
| CO2 CONCENTRATION PCT | | .6848 |
| NOX CONCENTRATION PPM | | 9.3 |
| THC MASS GRAMS | | .41 |
| CO MASS GRAMS | | .23 |
| CO2 MASS GRAMS | | 1120.4 |
| NOX MASS GRAMS | | 1.35 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .940 ( .932) |
| SCF, WET (DRY) | | 1.000 ( .979) |
| VOL (SCM) | | 89.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.25 |
| TEST NUMBER, | | B2FBL1-01 |
| BAROMETER, | MM HG | 746.8 |
| HUMIDITY, | G/KG | 5.4 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 899.1 |
| FUEL ECONOMY, | MPG | 5.5 |
| HYDROCARBONS, (THC) | G/MI | .33 |
| CARBON MONOXIDE, | G/MI | .18 |
| OXIDES OF NITROGEN, | G/MI | 1.08 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-2346-001

TEST NO. B2FJM1-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO. 95
DATE 12/26/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1161-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 36. PCT
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 6.3 GM/KG

NOX HUMIDITY CORRECTION FACTOR .87

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) | 41.1 (106.0) | 41.7 (107.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 48582. | 69584. | 48481. | 69517. |
| TOT FLOW STD. CU. METRES(SCF) | 75.9 ( 2680.) | 130.3 ( 4599.) | 75.7 ( 2673.) | 130.1 ( 4595.) |
| THC SAMPLE METER/RANGE/PPM | 33.0/ 2/ 33. | 7.8/ 2/ 8. | 8.7/ 2/ 9. | 8.0/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | 7.7/ 2/ 8. | 7.7/ 2/ 8. | 7.4/ 2/ 7. | 7.5/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | 67.0/ 13/ 160. | .9/ 12/ 1. | 1.4/ 12/ 1. | .7/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .2/ 13/ 0. | .1/ 12/ 0. | .1/ 12/ 0. | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 72.6/ 1/1.3385 | 88.9/ 14/ .8411 | 62.2/ 1/1.1429 | 88.0/ 14/ .8204 |
| CO2 BCKGRD METER/RANGE/PCT | 2.6/ 1/ .0459 | 13.4/ 14/ .0454 | 2.5/ 1/ .0441 | 13.3/ 14/ .0458 |
| NOX SAMPLE METER/RANGE/PPM | 85.9/ 1/ 21.5 | 20.8/ 1/ 5.3 | 69.6/ 1/ 17.4 | 22.1/ 1/ 5.6 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 1/ .1 | .1/ 1/ .0 | .2/ 1/ .1 | .1/ 1/ .0 |
| DILUTION FACTOR | 8.87 | 14.29 | 10.52 | 14.65 |
| THC CONCENTRATION PPM | 26. | 1. | 2. | 1. |
| CO CONCENTRATION PPM | 152. | 1. | 1. | 1. |
| CO2 CONCENTRATION PCT | 1.2978 | .7989 | 1.1030 | .7785 |
| NOX CONCENTRATION PPM | 21.4 | 5.3 | 17.4 | 5.6 |
| THC MASS GRAMS | 2.21 | .09 | .17 | .15 |
| CO MASS GRAMS | 13.42 | .12 | .11 | .09 |
| CO2 MASS GRAMS | 1803.3 | 1905.1 | 1528.7 | 1854.7 |
| NOX MASS GRAMS | 2.71 | 1.15 | 2.20 | 1.22 |
| THC GRAMS/MI | .61 | .02 | .05 | .04 |
| CO GRAMS/MI | 3.71 | .03 | .03 | .02 |
| CO2 GRAMS/MI | 498.4 | 488.0 | 424.8 | 474.6 |
| NOX GRAMS/MI | .75 | .29 | .61 | .31 |
| FUEL ECONOMY IN MPG | 9.76 9.94 | 10.10 | 11.60 10.94 | 10.39 |
| RUN TIME SECONDS | 585. | 867. | 585. | 867. |
| MEASURED DISTANCE MI | 3.62 7.52 | 3.90 | 3.60 7.51 | 3.91 |
| SCF, DRY | .966 .971 | .974 | .969 .973 | .975 |
| DFC, WET (DRY) | .914( .904) | | .922( .911) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 206.2/ .00 | | 205.8/ .00 | |

COMPOSITE RESULTS

| TEST NUMBER | | B2FJM1-02 |
|---|---|---|
| BAROMETER | MM HG | 746.5 |
| HUMIDITY | G/KG | 6.3 |
| TEMPERATURE | DEG C | 22.8 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 472.9 | ( 468.9) |
| FUEL ECONOMY | MPG | 10.48 | ( 10.48) |
| HYDROCARBONS (THC) | G/MI | .15 | ( .16) |
| CARBON MONOXIDE | G/MI | .79 | ( .79) |
| OXIDES OF NITROGEN | G/MI | .47 | ( .48) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FJM1-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 745.74 MM HG(29.36 IN HG)
RELATIVE HUMIDITY 35. PCT

VEHICLE NO.95
DATE 12/26/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 6.8 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1161-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .89

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 810.3 (31.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 805.2 (31.7) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61313. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.4 ( 4038.) |
| THC SAMPLE METER/RANGE/PPM | | 7.7/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | | 7.5/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | 1.2/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .2/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 84.1/ 1/1.5571 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.6/ 1/ .0459 |
| NOX SAMPLE METER/RANGE/PPM | | 38.1/ 2/ 38.1 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 2/ .1 |
| DILUTION FACTOR | | 7.72 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 1. |
| CO2 CONCENTRATION PCT | | 1.5172 |
| NOX CONCENTRATION PPM | | 38.1 |
| THC MASS GRAMS | | .15 |
| CO MASS GRAMS | | .13 |
| CO2 MASS GRAMS | | 3176.3 |
| NOX MASS GRAMS | | 5.83 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .871 ( .861) |
| SCF, WET (DRY) | | 1.000 ( .962) |
| VOL (SCM) | | 114.4 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.26 |

| | | |
|---|---|---|
| TEST NUMBER, | | B2FJM1-02 |
| BAROMETER, | MM HG | 745.7 |
| HUMIDITY, | G/KG | 6.8 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 309.5 |
| FUEL ECONOMY, | MPG | 15.9 |
| HYDROCARBONS, (THC) | G/MI | .01 |
| CARBON MONOXIDE, | G/MI | .01 |
| OXIDES OF NITROGEN, | G/MI | .57 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FJM1-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 745.49 MM HG(29.35 IN HG)
RELATIVE HUMIDITY 37. PCT

VEHICLE NO. 95
DATE 12/26/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 6.7 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1161-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| TEST CYCLE | NYCC |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 47927. |
| TOT FLOW STD. CU. METRES(SCF) | 89.7 ( 3167.) |
| THC SAMPLE METER/RANGE/PPM | 8.9/ 2/ 9. |
| THC BCKGRD METER/RANGE/PPM | 7.4/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | .4/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 83.0/ 14/ .7153 |
| CO2 BCKGRD METER/RANGE/PCT | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | 25.2/ 1/ 6.4 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 1/ .0 |
| DILUTION FACTOR | 16.00 |
| THC CONCENTRATION PPM | 2. |
| CO CONCENTRATION PPM | 0. |
| CO2 CONCENTRATION PCT | .6726 |
| NOX CONCENTRATION PPM | 6.4 |
| THC MASS GRAMS | .19 |
| CO MASS GRAMS | .03 |
| CO2 MASS GRAMS | 1104.3 |
| NOX MASS GRAMS | .96 |
| RUN TIME SECONDS | 598. |
| DFC, WET (DRY) | .940 ( .929) |
| SCF, WET (DRY) | 1.000 ( .976) |
| VOL (SCM) | 89.7 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.19 |

| TEST NUMBER, | | B2FJM1-02 |
|---|---|---|
| BAROMETER, | MM HG | 745.5 |
| HUMIDITY, | G/KG | 6.7 |
| TEMPERATURE, | DEG C | 23.3 |
| CARBON DIOXIDE, | G/MI | 930.2 |
| FUEL ECONOMY, | MPG | 5.3 |
| HYDROCARBONS, (THC) | G/MI | .16 |
| CARBON MONOXIDE, | G/MI | .03 |
| OXIDES OF NITROGEN, | G/MI | .81 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FJM1-03 RUN | VEHICLE NO. 95 | TEST WEIGHT 1928. KG( 4250. LBS)
VEHICLE MODEL 89 CROWN VICTORIA | DATE 1/ 3/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
ENGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 / CVS NO. 2 | GASOLINE EM-1179-F
TRANSMISSION A4 | DYNO NO. 3 | ODOMETER 2. KM( 1. MILES)

BAROMETER 749.81 MM HG(29.52 IN HG) | DRY BULB TEMP. 23.9 DEG C(75.0 DEG F) |
RELATIVE HUMIDITY 34. PCT | ABS. HUMIDITY 6.4 GM/KG | NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 41.1 (106.0) | 42.2 (108.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40544. | 69513. | 40474. | 69425. |
| TOT FLOW STD. CU. METRES(SCF) | 76.0 ( 2685.) | 130.8 ( 4617.) | 76.0 ( 2683.) | 130.6 ( 4611.) |
| THC SAMPLE METER/RANGE/PPM | 31.0/ 2/ 31. | 7.4/ 2/ 7. | 7.3/ 2/ 7. | 6.4/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | 8.2/ 2/ 8. | 7.2/ 2/ 7. | 6.3/ 2/ 6. | 6.2/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | 74.5/ 13/ 180. | .9/ 12/ 1. | 2.2/ 12/ 2. | .9/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .1/ 13/ 0. | .0/ 12/ 0. | .5/ 12/ 1. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 72.4/ 1/1.3347 | 88.2/ 14/ .8250 | 81.2/ 1/1.1242 | 87.2/ 14/ .8026 |
| CO2 BCKGRD METER/RANGE/PCT | 2.6/ 1/ .0459 | 12.8/ 14/ .0430 | 2.5/ 1/ .0441 | 12.6/ 14/ .0422 |
| NOX SAMPLE METER/RANGE/PPM | 79.7/ 1/ 20.0 | 24.6/ 1/ 6.2 | 71.7/ 1/ 18.0 | 22.4/ 1/ 5.7 |
| NOX BCKGRD METER/RANGE/PPM | .6/ 1/ .2 | .7/ 1/ .2 | .4/ 1/ .1 | .3/ 1/ .1 |
| DILUTION FACTOR | 8.88 | 14.57 | 10.70 | 14.98 |
| THC CONCENTRATION PPM | 24. | 1. | 2. | 1. |
| CO CONCENTRATION PPM | 171. | 1. | 2. | 1. |
| CO2 CONCENTRATION PCT | 1.2940 | .7849 | 1.0842 | .7631 |
| NOX CONCENTRATION PPM | 19.8 | 6.1 | 17.9 | 5.6 |
| THC MASS GRAMS | 2.01 | .10 | .13 | .09 |
| CO MASS GRAMS | 15.13 | .13 | .15 | .13 |
| CO2 MASS GRAMS | 1801.5 | 1879.1 | 1508.2 | 1824.5 |
| NOX MASS GRAMS | 2.52 | 1.33 | 2.27 | 1.23 |
| THC GRAMS/MI | .56 | .03 | .04 | .02 |
| CO GRAMS/MI | 4.21 | .03 | .04 | .03 |
| CO2 GRAMS/MI | 501.3 | 481.8 | 418.7 | 469.0 |
| NOX GRAMS/MI | .70 | .34 | .63 | .32 |
| FUEL ECONOMY IN MPG | 9.69 9.97 | 10.23 | 11.77 11.08 | 10.51 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.59 7.49 | 3.90 | 3.60 7.49 | 3.89 |
| SCF, DRY | .966 .972 | .975 | .970 .973 | .975 |
| DFC, WET (DRY) | .915( .905) | | .923( .913) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 206.8/ .00 | | 206.6/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | | B2FJM1-03 | | |
| BAROMETER | MM HG | 749.8 | | |
| HUMIDITY | G/KG | 6.4 | | |
| TEMPERATURE | DEG C | 23.9 | | |
| CARBON DIOXIDE | G/MI | | 468.6 | ( 464.8) |
| FUEL ECONOMY | MPG | | 10.49 | ( 10.57) |
| HYDROCARBONS (THC) | G/MI | | .14 | ( .14) |
| CARBON MONOXIDE | G/MI | | .98 | ( .98) |
| OXIDES OF NITROGEN | G/MI | | .49 | ( .49) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

HFET - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B2FJM1-03 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 750.32 MM HG(29.54 IN HG)
RELATIVE HUMIDITY 36. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 6.2 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .137 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .87

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 810.3 (31.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 61266. |
| TOT FLOW STD. CU. METRES(SCF) | 115.0 ( 4060.) |
| THC SAMPLE METER/RANGE/PPM | 6.2/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | 6.0/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | 1.4/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .2/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 31.5/ 1/1.5074 |
| CO2 BCKGRD METER/RANGE/PCT | 2.2/ 1/ .0388 |
| NOX SAMPLE METER/RANGE/PPM | 81.9/ 1/ 20.5 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 |
| DILUTION FACTOR | 7.98 |
| THC CONCENTRATION PPM | 1. |
| CO CONCENTRATION PPM | 1. |
| CO2 CONCENTRATION PCT | 1.4734 |
| NOX CONCENTRATION PPM | 20.4 |
| THC MASS GRAMS | .12 |
| CO MASS GRAMS | .16 |
| CO2 MASS GRAMS | 3101.9 |
| NOX MASS GRAMS | 3.91 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .875 ( .363) |
| SCF, WET (DRY) | 1.000 ( .963) |
| VOL (SCM) | 115.0 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.19 |
| TEST NUMBER, | B2FJM1-03 |
| BAROMETER, MM HG | 750.3 |
| HUMIDITY, G/KG | 6.2 |
| TEMPERATURE, DEG C | 22.8 |
| CARBON DIOXIDE, G/MI | 304.4 |
| FUEL ECONOMY, MPG | 16.2 |
| HYDROCARBONS, (THC) G/MI | .01 |
| CARBON MONOXIDE, G/MI | .02 |
| OXIDES OF NITROGEN, G/MI | .38 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FJM1-03 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 750.06 MM HG(29.53 IN HG)
RELATIVE HUMIDITY 33. PCT
BAG RESULTS

VEHICLE NO. 95
DATE 1/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 6.5 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .88

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 47752. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.8 ( 3170.) |
| THC SAMPLE METER/RANGE/PPM | | 7.1/ 2/ 7. |
| THC BCKGRD METER/RANGE/PPM | | 6.1/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | | .5/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .4/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 82.4/ 14/ .7036 |
| CO2 BCKGRD METER/RANGE/PCT | | 12.5/ 14/ .0418 |
| NOX SAMPLE METER/RANGE/PPM | | 27.9/ 1/ 7.1 |
| NOX BCKGRD METER/RANGE/PPM | | .2/ 1/ .1 |
| DILUTION FACTOR | | 17.08 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .6642 |
| NOX CONCENTRATION PPM | | 7.0 |
| THC MASS GRAMS | | .14 |
| CO MASS GRAMS | | .01 |
| CO2 MASS GRAMS | | 1091.6 |
| NOX MASS GRAMS | | 1.06 |
| RUN TIME | SECONDS | 596. |
| DFC, WET (DRY) | | .941 ( .932) |
| SCF, WET (DRY) | | 1.000 ( .978) |
| VOL (SCM) | | 89.8 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.18 |
| TEST NUMBER, | | B2FJM1-03 |
| BAROMETER, | MM HG | 750.1 |
| HUMIDITY, | G/KG | 6.5 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 922.8 |
| FUEL ECONOMY, | MPG | 5.3 |
| HYDROCARBONS, (THC) | G/MI | .11 |
| CARBON MONOXIDE, | G/MI | .01 |
| OXIDES OF NITROGEN, | G/MI | .89 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. 92FD-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 1/23/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 742.95 MM HG(29.25 IN HG)
RELATIVE HUMIDITY 36. PCT

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 6.3 GM/KG

NOX HUMIDITY CORRECTION FACTOR .87

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 787.4 (31.0) | 795.0 (31.3) | 787.4 (31.0) | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | 784.9 (30.9) | 789.9 (31.1) | 784.9 (30.9) | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) | 41.1 (106.0) | 41.7 (107.0) | 40.6 (105.0) |
| BLOWER REVOLUTIONS | 40496. | 69498. | 40444. | 69440. |
| TOT FLOW STD. CU. METRES(SCF) | 75.4 ( 2661.) | 129.5 ( 4572.) | 75.3 ( 2660.) | 129.6 ( 4575.) |
| THC SAMPLE METER/RANGE/PPM | 32.5/ 2/ 32. | 7.8/ 2/ 8. | 8.3/ 2/ 8. | 7.8/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | 7.9/ 2/ 8. | 7.8/ 2/ 8. | 7.7/ 2/ 8. | 7.7/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | 54.3/ 13/ 126. | .7/ 12/ 1. | .6/ 12/ 1. | .6/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .4/ 13/ 1. | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 74.5/ 1/1.3744 | 89.0/ 14/ .8434 | 62.7/ 1/1.1523 | 88.2/ 14/ .8250 |
| CO2 BCKGRD METER/RANGE/PCT | 2.6/ 1/ .0459 | 13.6/ 14/ .0462 | 2.6/ 1/ .0459 | 13.5/ 14/ .0458 |
| NOX SAMPLE METER/RANGE/PPM | 47.6/ 1/ 11.9 | 22.6/ 1/ 5.7 | 60.0/ 1/ 15.0 | 21.6/ 1/ 5.5 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 | .4/ 1/ .1 | .5/ 1/ .1 | .5/ 1/ .1 |
| DILUTION FACTOR | 8.66 | 14.25 | 10.44 | 14.57 |
| THC CONCENTRATION PPM | 25. | 1. | 1. | 1. |
| CO CONCENTRATION PPM | 121. | 1. | 1. | 1. |
| CO2 CONCENTRATION PCT | 1.3338 | .8005 | 1.1108 | .7823 |
| NOX CONCENTRATION PPM | 11.9 | 5.7 | 14.9 | 5.4 |
| THC MASS GRAMS | 2.14 | .08 | .11 | .09 |
| CO MASS GRAMS | 10.58 | .10 | .05 | .09 |
| CO2 MASS GRAMS | 1840.4 | 1897.7 | 1532.2 | 1855.9 |
| NOX MASS GRAMS | 1.50 | 1.22 | 1.88 | 1.17 |
| THC GRAMS/MI | .59 | .02 | .03 | .02 |
| CO GRAMS/MI | 2.94 | .03 | .01 | .02 |
| CO2 GRAMS/MI | 511.0 | 486.4 | 424.9 | 474.3 |
| NOX GRAMS/MI | .42 | .31 | .52 | .30 |
| FUEL ECONOMY IN MPG | 9.55 9.84 | 10.14 | 11.60 10.94 | 10.39 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.60 7.50 | 3.90 | 3.61 7.52 | 3.91 |
| SCF. DRY | .965 .971 | .974 | .969 .972 | .974 |
| DFC. WET (DRY) | .913( .903) | | .921( .911) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 204.9/ .00 | | 204.9/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | 92FD-01 | CARBON DIOXIDE | G/MI | 474.6 | ( 471.1) |
| BAROMETER | MM HG 743.0 | FUEL ECONOMY | MPG | 10.36 | ( 10.44) |
| HUMIDITY | G/KG 6.3 | HYDROCARBONS (THC) | G/MI | .14 | ( .14) |
| TEMPERATURE | DEG C 22.8 | CARBON MONOXIDE | G/MI | .62 | ( .62) |
| | | OXIDES OF NITROGEN | G/MI | .39 | ( .39) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FD-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 742.70 MM HG(29.24 IN HG)
RELATIVE HUMIDITY 36. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/23/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 7.3 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .98

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61188. |
| TOT FLOW STD. CU. METRES(SCF) | | 113.8 ( 4017.) |
| THC SAMPLE METER/RANGE/PPM | | 8.0/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | | 7.6/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | | .4/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 84.8/ 1/1.5705 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | | 25.0/ 2/ 25.1 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 2/ .1 |
| DILUTION FACTOR | | 7.66 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.5291 |
| NOX CONCENTRATION PPM | | 25.0 |
| THC MASS GRAMS | | .18 |
| CO MASS GRAMS | | .05 |
| CO2 MASS GRAMS | | 3184.6 |
| NOX MASS GRAMS | | 4.88 |
| RUN TIME | SECONDS | 765. |
| DFC. WET (DRY) | | .869 ( .859) |
| SCF. WET (DRY) | | 1.000 ( .962) |
| VOL (SCM) | | 113.8 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.27 |
| TEST NUMBER. | | B2FD-01 |
| BAROMETER. | MM HG | 742.7 |
| HUMIDITY. | G/KG | 7.3 |
| TEMPERATURE. | DEG C | 25.0 |
| CARBON DIOXIDE. | G/MI | 310.1 |
| FUEL ECONOMY. | MPG | 15.9 |
| HYDROCARBONS. (THC) | G/MI | .02 |
| CARBON MONOXIDE. | G/MI | .00 |
| OXIDES OF NITROGEN. | G/MI | .48 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. 82FD-01 RUN | VEHICLE NO.95 | TEST WEIGHT 1928. KG( 4250. LBS)
VEHICLE MODEL 89 CROWN VICTORIA | DATE 1/23/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
ENGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 | GASOLINE EM-1179.F
TRANSMISSION A4 | DYNO NO. 3 | ODOMETER 2. KM( 1. MILES)
| CVS NO. 2 | C = .449 H = .127 O = .424
BAROMETER 742.44 MM HG(29.23 IN HG) | DRY BULB TEMP. 23.3 DEG C(74.0 DEG F) | FUEL DENSITY = 6.61
RELATIVE HUMIDITY 37. PCT | ABS. HUMIDITY 6.7 GM/KG | NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| | |
|---|---|
| TEST CYCLE | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 47724. |
| TOT FLOW STD. CU. METRES(SCF) | 88.8 ( 3135.) |
| THC SAMPLE METER/RANGE/PPM | 7.9/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | 7.6/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | 1.1/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .4/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 82.8/ 14/ .7114 |
| CO2 BCKGRD METER/RANGE/PCT | 13.7/ 14/ .0466 |
| NOX SAMPLE METER/RANGE/PPM | 27.1/ 1/ 6.9 |
| NOX BCKGRD METER/RANGE/PPM | .4/ 1/ .1 |
| DILUTION FACTOR | 16.90 |
| THC CONCENTRATION PPM | 1. |
| CO CONCENTRATION PPM | 1. |
| CO2 CONCENTRATION PCT | .5675 |
| NOX CONCENTRATION PPM | 6.8 |
| THC MASS GRAMS | .07 |
| CO MASS GRAMS | .07 |
| CO2 MASS GRAMS | 1085.3 |
| NOX MASS GRAMS | 1.02 |
| RUN TIME SECONDS | 597. |
| DFC. WET (DRY) | .941 ( .930) |
| SCF. WET (DRY) | 1.000 ( .976) |
| VOL (SCM) | 88.8 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.19 |

| | | |
|---|---|---|
| TEST NUMBER. | | 82FD-01 |
| BAROMETER. | MM HG | 742.4 |
| HUMIDITY. | G/KG | 6.7 |
| TEMPERATURE. | DEG C | 23.3 |
| CARBON DIOXIDE. | G/MI | 913.6 |
| FUEL ECONOMY. | MPG | 5.4 |
| HYDROCARBONS. (THC) | G/MI | .06 |
| CARBON MONOXIDE. | G/MI | .06 |
| OXIDES OF NITROGEN. | G/MI | .05 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B2FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 1/24/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 38. PCT

DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 7.0 GM/KG

NOX HUMIDITY CORRECTION FACTOR .89

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 795.0 (31.3) | 782.3 (30.8) | 795.0 (31.3) | 808.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 789.9 (31.1) | 808.1 (31.5) | 789.9 (31.1) | 789.9 (31.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.1 (106.0) | 38.9 (102.0) | 41.7 (107.0) | 38.9 (102.0) |
| BLOWER REVOLUTIONS | 40520. | 69497. | 40475. | 69437. |
| TOT FLOW STD. CU. METRES(SCF) | 75.9 ( 2680.) | 130.7 ( 4613.) | 75.7 ( 2674.) | 130.6 ( 4612.) |
| THC SAMPLE METER/RANGE/PPM | 32.3/ 2/ 32. | 5.8/ 2/ 6. | 6.1/ 2/ 6. | 5.3/ 2/ 5. |
| THC BCKGRD METER/RANGE/PPM | 6.1/ 2/ 6. | 5.7/ 2/ 6. | 5.5/ 2/ 5. | 5.3/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | 68.2/ 13/ 142. | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .0/ 13/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 72.6/ 1/1.3385 | 88.3/ 14/ .8273 | 62.1/ 1/1.1411 | 87.5/ 14/ .8092 |
| CO2 BCKGRD METER/RANGE/PCT | 2.4/ 1/ .0423 | 12.5/ 14/ .0418 | 2.4/ 1/ .0423 | 12.3/ 14/ .0411 |
| NOX SAMPLE METER/RANGE/PPM | 48.9/ 1/ 12.3 | 21.6/ 1/ 5.5 | 53.3/ 1/ 13.4 | 22.6/ 1/ 5.7 |
| NOX BCKGRD METER/RANGE/PPM | .0/ 1/ .0 | .0/ 1/ .0 | .0/ 1/ .0 | .1/ 1/ .0 |
| DILUTION FACTOR | 8.88 | 14.54 | 10.54 | 14.86 |
| THC CONCENTRATION PPM | 27. | 0. | 1. | 0. |
| CO CONCENTRATION PPM | 136. | 0. | 0. | 0. |
| CO2 CONCENTRATION PCT | 1.3009 | .7883 | 1.1028 | .7709 |
| NOX CONCENTRATION PPM | 12.3 | 5.5 | 13.4 | 5.7 |
| THC MASS GRAMS | 2.27 | .07 | .09 | .05 |
| CO MASS GRAMS | 11.99 | .00 | .00 | .00 |
| CO2 MASS GRAMS | 1808.0 | 1885.6 | 1529.2 | 1843.3 |
| NOX MASS GRAMS | 1.59 | 1.23 | 1.73 | 1.28 |
| THC GRAMS/MI | .63 | .02 | .03 | .01 |
| CO GRAMS/MI | 3.33 | .00 | .00 | .00 |
| CO2 GRAMS/MI | 502.9 | 485.3 | 423.8 | 472.6 |
| NOX GRAMS/MI | .44 | .32 | .48 | .33 |
| FUEL ECONOMY IN MPG | 9.69 | 9.93 10.16 | 11.64 | 10.98 10.43 |
| RUN TIME SECONDS | 585. | 867. | 585. | 867. |
| MEASURED DISTANCE MI | 3.68 | 7.48 3.89 | 3.61 | 7.51 3.98 |
| SCF, DRY | .965 | .971 .974 | .969 | .972 .974 |
| DFC, WET (DRY) | .915( .904) | | .923( .911) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 206.6/ .00 | | 206.3/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B2FD-02 |
| BAROMETER | MM HG | 746.5 |
| HUMIDITY | G/KG | 7.0 |
| TEMPERATURE | DEG C | 23.9 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 472.1 | ( 468.3) |
| FUEL ECONOMY | MPG | 10.42 | ( 10.58) |
| HYDROCARBONS (THC) | G/MI | .15 | ( .15) |
| CARBON MONOXIDE | G/MI | .69 | ( .69) |
| OXIDES OF NITROGEN | G/MI | .39 | ( .39) |

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TEST NO. B2FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 35. PCT

VEHICLE NO.95
DATE 1/24/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 6.8 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .89

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 810.3 (31.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61253. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.5 ( 4042.) |
| THC SAMPLE METER/RANGE/PPM | | 5.5/ 2/ 5. |
| THC BCKGRD METER/RANGE/PPM | | 5.3/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | | .0/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 83.2/ 1/1.5399 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.6/ 1/ .0459 |
| NOX SAMPLE METER/RANGE/PPM | | 40.4/ 2/ 40.4 |
| NOX BCKGRD METER/RANGE/PPM | | .3/ 2/ .3 |
| DILUTION FACTOR | | 7.81 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.4999 |
| NOX CONCENTRATION PPM | | 40.2 |
| THC MASS GRAMS | | .11 |
| CO MASS GRAMS | | .00 |
| CO2 MASS GRAMS | | 3143.4 |
| NOX MASS GRAMS | | 7.79 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .872 ( .862) |
| SCF, WET (DRY) | | 1.000 ( .963) |
| VOL (SCM) | | 114.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.27 |
| TEST NUMBER, | | B2FD-02 |
| BAROMETER, | MM HG | 746.8 |
| HUMIDITY, | G/KG | 6.8 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 306.2 |
| FUEL ECONOMY, | MPG | 16.1 |
| HYDROCARBONS, (THC) | G/MI | .01 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .76 |

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TEST NO. B2FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 747.01 MM HG(29.41 IN HG)
RELATIVE HUMIDITY 35. PCT

VEHICLE NO. 95
DATE 1/24/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 6.8 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179,F
ODOMETER 2. KM( 1. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .89

BAG RESULTS

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.1 (106.0) |
| BLOWER REVOLUTIONS | | 47688. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.4 ( 3157.) |
| THC SAMPLE METER/RANGE/PPM | | 5.6/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | | 5.1/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | | .0/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 82.0/ 14/ .6960 |
| CO2 BCKGRD METER/RANGE/PCT | | 12.2/ 14/ .0407 |
| NOX SAMPLE METER/RANGE/PPM | | 26.7/ 1/ 6.8 |
| NOX BCKGRD METER/RANGE/PPM | | .1/ 1/ .0 |
| DILUTION FACTOR | | 17.28 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .6576 |
| NOX CONCENTRATION PPM | | 6.7 |
| THC MASS GRAMS | | .08 |
| CO MASS GRAMS | | .00 |
| CO2 MASS GRAMS | | 1076.6 |
| NOX MASS GRAMS | | 1.02 |
| RUN TIME | SECONDS | 596. |
| DFC, WET (DRY) | | .942 ( .931) |
| SCF, WET (DRY) | | 1.000 ( .977) |
| VOL (SCM) | | 89.4 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.19 |
| TEST NUMBER, | | B2FD-02 |
| BAROMETER, | MM HG | 747.0 |
| HUMIDITY, | G/KG | 6.8 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 906.5 |
| FUEL ECONOMY, | MPG | 5.4 |
| HYDROCARBONS, (THC) | G/MI | .07 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .86 |

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TEST NO. B2FHC-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 5/ 2/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 0. KM( 0. MILES)

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 65. PCT
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.7 GM/KG
NOX HUMIDITY CORRECTION FACTOR 1.03

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 44.4 (112.0) | 43.3 (110.0) | 44.4 (112.0) | 43.9 (111.0) |
| BLOWER REVOLUTIONS | 39951. | 68687. | 39943. | 68644. |
| TOT FLOW STD. CU. METRES(SCF) | 71.0 ( 2507.) | 122.5 ( 4325.) | 71.0 ( 2507.) | 122.2 ( 4315.) |
| THC SAMPLE METER/RANGE/PPM | 16.3/ 2/ 16. | 12.2/ 2/ 12. | 13.3/ 2/ 13. | 12.5/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 10.3/ 2/ 10. | 10.8/ 2/ 11. | 11.1/ 2/ 11. | 11.1/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | 51.2/ 12/ 51. | .6/ 12/ 1. | 13.1/ 12/ 13. | 1.6/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .5/ 12/ 1. | .5/ 12/ 1. | 1.8/ 12/ 2. | 1.6/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 80.3/ 1/1.4848 | 91.7/ 14/ .9091 | 67.8/ 1/1.2539 | 91.3/ 14/ .8990 |
| CO2 BCKGRD METER/RANGE/PCT | 2.6/ 1/ .0455 | 12.8/ 14/ .0430 | 2.5/ 1/ .0437 | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | 62.9/ 1/ 15.8 | 29.1/ 1/ 7.4 | 62.5/ 1/ 15.7 | 29.0/ 1/ 7.3 |
| NOX BCKGRD METER/RANGE/PPM | .3/ 1/ .1 | .3/ 1/ .1 | .6/ 1/ .2 | .5/ 1/ .1 |
| DILUTION FACTOR | 7.99 | 13.08 | 9.48 | 13.23 |
| THC CONCENTRATION PPM | 7. | 2. | 3. | 2. |
| CO CONCENTRATION PPM | 47. | 0. | 11. | 0. |
| CO2 CONCENTRATION PCT | 1.4450 | .8694 | 1.2148 | .8571 |
| NOX CONCENTRATION PPM | 15.7 | 7.3 | 15.5 | 7.2 |
| THC MASS GRAMS | .59 | .31 | .27 | .31 |
| CO MASS GRAMS | 3.91 | .02 | .89 | .01 |
| CO2 MASS GRAMS | 1878.4 | 1949.7 | 1578.9 | 1917.5 |
| NOX MASS GRAMS | 2.20 | 1.76 | 2.18 | 1.74 |
| THC GRAMS/MI | .17 | .08 | .08 | .08 |
| CO GRAMS/MI | 1.09 | .00 | .25 | .00 |
| CO2 GRAMS/MI | 523.7 | 504.7 | 439.3 | 495.2 |
| NOX GRAMS/MI | .61 | .46 | .61 | .45 |
| FUEL ECONOMY IN MPG | 9.04 9.23 | 9.42 | 10.81 10.15 | 9.60 |
| RUN TIME SECONDS | 504. | 868. | 504. | 868. |
| MEASURED DISTANCE MI | 3.59 7.45 | 3.86 | 3.59 7.47 | 3.87 |
| SCF, DRY | .953 .959 | .963 | .957 .961 | .963 |
| DFC, WET (DRY) | .906( .887) | | .913( .894) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 193.5/ .00 | | 193.2/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B2FHC-01 |
| BAROMETER | MM HG | 738.1 |
| HUMIDITY | G/KG | 11.7 |
| TEMPERATURE | DEG C | 22.8 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 490.7 | ( 487.9) |
| FUEL ECONOMY | MPG | 9.68 | ( 9.73) |
| HYDROCARBONS (THC) | G/MI | .10 | ( .10) |
| CARBON MONOXIDE | G/MI | .30 | ( .30) |
| OXIDES OF NITROGEN | G/MI | .53 | ( .53) |

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| | | |
|---|---|---|
| EST NO. B2FHC-01 RUN | VEHICLE NO.95 | TEST WEIGHT 1928. KG( 4250. LBS) |
| EHICLE MODEL 89 CROWN VICTORIA | DATE 5/ 2/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP) |
| NGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 | GASOLINE EM-1179-F |
| RANSMISSION A4 | DYNO NO. 3 | ODOMETER 0. KM( 0. MILES) |
| | CVS NO. 2 | C = .436 H = .128 O = .437 |
| AROMETER 737.87 MM HG(29.05 IN HG) | DRY BULB TEMP. 23.3 DEG C(74.0 DEG F) | FUEL DENSITY = 6.57 |
| ELATIVE HUMIDITY 58. PCT | ABS. HUMIDITY 10.8 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.00 |

AG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 44.4 (112.0) |
| BLOWER REVOLUTIONS | | 60605. |
| TOT FLOW STD. CU. METRES(SCF) | | 107.7 ( 3802.) |
| THC SAMPLE METER/RANGE/PPM | | 12.1/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | | 11.5/ 2/ 11. |
| CO SAMPLE METER/RANGE/PPM | | 1.7/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | | 1.6/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 89.1/ 1/1.6526 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.4/ 1/ .0420 |
| NOX SAMPLE METER/RANGE/PPM | | 65.5/ 1/ 16.4 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 7.20 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.6165 |
| NOX CONCENTRATION PPM | | 16.3 |
| THC MASS GRAMS | | .27 |
| CO MASS GRAMS | | .03 |
| CO2 MASS GRAMS | | 3186.3 |
| NOX MASS GRAMS | | 3.36 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .861 ( .845) |
| SCF, WET (DRY) | | 1.000 ( .952) |
| VOL (SCM) | | 107.7 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.22 |
| TEST NUMBER, | | B2FHC-01 |
| BAROMETER, | MM HG | 737.9 |
| HUMIDITY, | G/KG | 10.8 |
| TEMPERATURE, | DEG C | 23.3 |
| CARBON DIOXIDE, | G/MI | 311.7 |
| FUEL ECONOMY, | MPG | 15.3 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .33 |

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TEST NO. B2FHC RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 737.62 MM HG(29.04 IN HG)
RELATIVE HUMIDITY 62. PCT

VEHICLE NO.95
DATE 5/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.0 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 0. KM( 0. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.01

BAG RESULTS

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 43.3 (110.0) |
| BLOWER REVOLUTIONS | | 47477. |
| TOT FLOW STD. CU. METRES(SCF) | | 84.6 ( 2987.) |
| THC SAMPLE METER/RANGE/PPM | | 12.8/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | | 10.4/ 2/ 10. |
| CO SAMPLE METER/RANGE/PPM | | 1.3/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | 1.1/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 85.4/ 14/ .7639 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.3/ 14/ .0450 |
| NOX SAMPLE METER/RANGE/PPM | | 28.8/ 1/ 7.3 |
| NOX BCKGRD METER/RANGE/PPM | | .0/ 1/ .0 |
| DILUTION FACTOR | | 15.56 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .7218 |
| NOX CONCENTRATION PPM | | 7.3 |
| THC MASS GRAMS | | .30 |
| CO MASS GRAMS | | .02 |
| CO2 MASS GRAMS | | 1117.9 |
| NOX MASS GRAMS | | 1.19 |
| RUN TIME | SECONDS | 600. |
| DFC, WET (DRY) | | .936 ( .917) |
| SCF, WET (DRY) | | 1.000 ( .967) |
| VOL (SCM) | | 84.6 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.18 |
| TEST NUMBER, | | B2FHC |
| BAROMETER, | MM HG | 737.6 |
| HUMIDITY, | G/KG | 11.0 |
| TEMPERATURE, | DEG C | 22.8 |
| CARBON DIOXIDE, | G/MI | 950.9 |
| FUEL ECONOMY, | MPG | 5.0 |
| HYDROCARBONS, (THC) | G/MI | .25 |
| CARBON MONOXIDE, | G/MI | .02 |
| OXIDES OF NITROGEN, | G/MI | 1.01 |

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TEST NO. B2FHC-02 RUN | VEHICLE NO.95 | TEST WEIGHT 1928. KG( 4250. LBS)
VEHICLE MODEL 89 CROWN VICTORIA | DATE 5/ 3/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
ENGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 / CVS NO. 2 | GASOLINE EM-1179-F
TRANSMISSION A4 | DYNO NO. 3 | ODOMETER 0. KM( 0. MILES)

BAROMETER 734.31 MM HG(28.91 IN HG) | DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
RELATIVE HUMIDITY 73. PCT | ABS. HUMIDITY 12.3 GM/KG | NOX HUMIDITY CORRECTION FACTOR 1.05

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) | 41.7 (107.0) | 43.9 (111.0) | 42.8 (109.0) |
| BLOWER REVOLUTIONS | 40161. | 68908. | 39958. | 68660. |
| TOT FLOW STD. CU. METRES(SCF) | 71.5 ( 2524.) | 122.9 ( 4338.) | 70.7 ( 2497.) | 121.9 ( 4306.) |
| THC SAMPLE METER/RANGE/PPM | 19.3/ 2/ 19. | 16.0/ 2/ 16. | 14.4/ 2/ 14. | 13.2/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | 13.4/ 2/ 13. | 15.0/ 2/ 15. | 11.9/ 2/ 12. | 11.6/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | 43.3/ 12/ 43. | .5/ 12/ 1. | 6.6/ 12/ 7. | .4/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .5/ 12/ 1. | .5/ 12/ 1. | .4/ 12/ 0. | .4/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 79.7/ 1/1.4735 | 91.4/ 14/ .9015 | 67.5/ 1/1.2484 | 90.8/ 14/ .8866 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0437 | 12.6/ 14/ .0422 | 2.6/ 1/ .0455 | 13.8/ 14/ .0470 |
| NOX SAMPLE METER/RANGE/PPM | 65.6/ 1/ 16.4 | 26.0/ 1/ 6.6 | 65.4/ 1/ 16.4 | 31.5/ 1/ 8.0 |
| NOX BCKGRD METER/RANGE/PPM | .8/ 1/ .2 | .5/ 1/ .1 | 1.0/ 1/ .3 | 1.0/ 1/ .3 |
| DILUTION FACTOR | 8.05 | 13.19 | 9.53 | 13.41 |
| THC CONCENTRATION PPM | 8. | 2. | 4. | 2. |
| CO CONCENTRATION PPM | 40. | 0. | 6. | 0. |
| CO2 CONCENTRATION PCT | 1.4352 | .8625 | 1.2077 | .8431 |
| NOX CONCENTRATION PPM | 16.3 | 6.5 | 16.2 | 7.7 |
| THC MASS GRAMS | .62 | .30 | .30 | .34 |
| CO MASS GRAMS | 3.32 | .00 | .49 | .00 |
| CO2 MASS GRAMS | 1878.3 | 1940.0 | 1563.5 | 1882.1 |
| NOX MASS GRAMS | 2.34 | 1.60 | 2.30 | 1.89 |
| THC GRAMS/MI | .17 | .08 | .08 | .09 |
| CO GRAMS/MI | .92 | .00 | .14 | .00 |
| CO2 GRAMS/MI | 521.1 | 498.6 | 433.4 | 487.1 |
| NOX GRAMS/MI | .65 | .41 | .64 | .49 |
| FUEL ECONOMY IN MPG | 9.10 | 9.32 9.53 | 10.96 | 10.30 9.76 |
| RUN TIME SECONDS | 505. | 868. | 505. | 868. |
| MEASURED DISTANCE MI | 3.60 | 7.50 3.89 | 3.61 | 7.47 3.86 |
| SCF, DRY | .951 | .957 .961 | .955 | .959 .961 |
| DFC, WET (DRY) | | .906( .885) | | .914( .893) |
| TOT VOL (SCM) / SAM BLR (SCM) | | 194.3/ .00 | | 192.6/ .00 |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | | B2FHC-02 | | |
| BAROMETER | MM HG | 734.3 | | |
| HUMIDITY | G/KG | 12.3 | | |
| TEMPERATURE | DEG C | 21.7 | | |
| CARBON DIOXIDE | G/MI | | 485.4 | ( 481.9) |
| FUEL ECONOMY | MPG | | 9.79 | ( 9.86) |
| HYDROCARBONS (THC) | G/MI | | .10 | ( .10) |
| CARBON MONOXIDE | G/MI | | .23 | ( .23) |
| OXIDES OF NITROGEN | G/MI | | .52 | ( .55) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3381-001

EST NO. B2FHC-02 RUN
EHICLE MODEL 89 CROWN VICTORIA
NGINE 4.9 L(302. CID) V-8
RANSMISSION A4

AROMETER 734.06 MM HG(28.90 IN HG)
ELATIVE HUMIDITY 52. PCT
AG RESULTS

VEHICLE NO.95
DATE 5/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 10.4 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 0. KM( 0. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .99

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 44.4 (112.0) |
| BLOWER REVOLUTIONS | | 60637. |
| TOT FLOW STD. CU. METRES(SCF) | | 107.1 ( 3781.) |
| THC SAMPLE METER/RANGE/PPM | | 13.5/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | | 12.3/ 2/ 12. |
| CO SAMPLE METER/RANGE/PPM | | .4/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | | .2/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 87.1/ 1/1.6139 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.5/ 1/ .0437 |
| NOX SAMPLE METER/RANGE/PPM | | 58.3/ 1/ 14.6 |
| NOX BCKGRD METER/RANGE/PPM | | .6/ 1/ .2 |
| DILUTION FACTOR | | 7.37 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.5761 |
| NOX CONCENTRATION PPM | | 14.5 |
| THC MASS GRAMS | | .35 |
| CO MASS GRAMS | | .03 |
| CO2 MASS GRAMS | | 3089.9 |
| NOX MASS GRAMS | | 2.93 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .864 ( .850) |
| SCF, WET (DRY) | | 1.000 ( .955) |
| VOL (SCM) | | 107.1 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.20 |
| TEST NUMBER, | | B2FHC-02 |
| BAROMETER, | MM HG | 734.1 |
| HUMIDITY, | G/KG | 10.4 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 302.9 |
| FUEL ECONOMY, | MPG | 15.7 |
| HYDROCARBONS, (THC) | G/MI | .03 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .29 |

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PROJECT 08-3381-001

TEST NO. B2FHC-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 731.52 MM HG(28.80 IN HG)
RELATIVE HUMIDITY 62. PCT

VEHICLE NO.95
DATE 5/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.1 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1179-F
ODOMETER 0. KM( 0. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.01

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 43.3 (110.0) |
| BLOWER REVOLUTIONS | | 47413. |
| TOT FLOW STD. CU. METRES(SCF) | | 83.7 ( 2955.) |
| THC SAMPLE METER/RANGE/PPM | | 15.4/ 2/ 15. |
| THC BCKGRD METER/RANGE/PPM | | 12.9/ 2/ 13. |
| CO SAMPLE METER/RANGE/PPM | | .7/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .5/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | | 85.5/ 14/ .7659 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.6/ 14/ .0462 |
| NOX SAMPLE METER/RANGE/PPM | | 31.3/ 1/ 7.9 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 15.52 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .7227 |
| NOX CONCENTRATION PPM | | 7.8 |
| THC MASS GRAMS | | .32 |
| CO MASS GRAMS | | .02 |
| CO2 MASS GRAMS | | 1107.2 |
| NOX MASS GRAMS | | 1.26 |
| RUN TIME | SECONDS | 599. |
| DFC, WET (DRY) | | .936 ( .917) |
| SCF, WET (DRY) | | 1.000 ( .967) |
| VOL (SCM) | | 83.7 |
| SAM BLR (SCM) | | .00 |
| NI (MEASURED) | | 1.17 |
| TEST NUMBER, | | B2FHC-02 |
| BAROMETER, | MM HG | 731.5 |
| HUMIDITY, | G/KG | 11.1 |
| TEMPERATURE, | DEG C | 22.8 |
| CARBON DIOXIDE, | G/MI | 946.6 |
| FUEL ECONOMY, | MPG | 5.0 |
| HYDROCARBONS, (THC) | G/MI | .27 |
| CARBON MONOXIDE, | G/MI | .02 |
| OXIDES OF NITROGEN, | G/MI | 1.08 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-2346-001

TEST NO. B1FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 1/ 9/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 744.47 MM HG(29.31 IN HG)
RELATIVE HUMIDITY 44. PCT
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 8.0 GM/KG

NOX HUMIDITY CORRECTION FACTOR .92

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 795.0 (31.3) | 800.1 (31.5) | 795.0 (31.3) | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | 789.9 (31.1) | 795.0 (31.3) | 789.9 (31.1) | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 41.7 (107.0) | 42.2 (108.0) | 41.7 (107.0) |
| BLOWER REVOLUTIONS | 40553. | 69506. | 40468. | 69455. |
| TOT FLOW STD. CU. METRES(SCF) | 75.5 ( 2666.) | 129.6 ( 4575.) | 75.4 ( 2663.) | 129.6 ( 4577.) |
| THC SAMPLE METER/RANGE/PPM | 50.4/ 2/ 50. | 11.3/ 2/ 11. | 17.5/ 2/ 17. | 12.6/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | 6.2/ 2/ 6. | 6.5/ 2/ 6. | 6.5/ 2/ 6. | 6.9/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | 76.3/ 12/ 76. | .5/ 12/ 1. | 3.0/ 12/ 3. | .5/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 76.2/ 1/1.4866 | 91.7/ 14/ .9091 | 66.7/ 1/1.2274 | 90.8/ 14/ .8866 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0441 | 12.9/ 14/ .0434 | 2.4/ 1/ .0423 | 12.6/ 14/ .0422 |
| NOX SAMPLE METER/RANGE/PPM | 27.9/ 2/ 28.0 | 35.2/ 1/ 8.9 | 70.5/ 1/ 17.7 | 36.6/ 1/ 9.2 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 2/ .2 | .7/ 1/ .2 | .4/ 1/ .1 | .4/ 1/ .1 |
| DILUTION FACTOR | 9.44 | 14.72 | 10.90 | 15.09 |
| THC CONCENTRATION PPM | 45. | 5. | 12. | 6. |
| CO CONCENTRATION PPM | 73. | 0. | 3. | 0. |
| CO2 CONCENTRATION PCT | 1.3672 | .8686 | 1.1889 | .8471 |
| NOX CONCENTRATION PPM | 27.8 | 8.7 | 17.6 | 9.1 |
| THC MASS GRAMS | 1.95 | .39 | .58 | .46 |
| CO MASS GRAMS | 6.43 | .07 | .26 | .07 |
| CO2 MASS GRAMS | 1898.1 | 2868.7 | 1641.7 | 2818.5 |
| NOX MASS GRAMS | 3.68 | 1.97 | 2.32 | 2.07 |
| THC GRAMS/MI | .54 | .10 | .14 | .12 |
| CO GRAMS/MI | 1.79 | .02 | .07 | .02 |
| CO2 GRAMS/MI | 526.8 | 529.7 | 456.5 | 516.6 |
| NOX GRAMS/MI | 1.02 | .51 | .65 | .53 |
| FUEL ECONOMY IN MPG | 16.69 16.71 | 16.73 | 19.48 18.16 | 17.15 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.59 7.48 | 3.89 | 3.60 7.49 | 3.89 |
| SCF, DRY | .973 .976 | .978 | .975 .977 | .978 |
| DFC, WET (DRY) | .918( .905) | | .924( .911) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 285.1/ .00 | | 285.1/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1FBL1-01 |
| BAROMETER | MM HG | 744.5 |
| HUMIDITY | G/KG | 8.0 |
| TEMPERATURE | DEG C | 23.3 |

| | | 3-BAG | (4-BAG |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 589.1 | ( 585.2 |
| FUEL ECONOMY | MPG | 17.38 | ( 17.51 |
| HYDROCARBONS (THC) | G/MI | .20 | ( .21 |
| CARBON MONOXIDE | G/MI | .40 | ( .40 |
| OXIDES OF NITROGEN | G/MI | .65 | ( .66 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-2346-001

TEST NO. B1FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 743.97 MM HG(29.29 IN HG)
RELATIVE HUMIDITY 42. PCT

VEHICLE NO.95
DATE 1/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 8.1 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .92

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 812.8 (32.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 61282. |
| TOT FLOW STD. CU. METRES(SCF) | | 113.9 ( 4023.) |
| THC SAMPLE METER/RANGE/PPM | | 17.0/ 2/ 17. |
| THC BCKGRD METER/RANGE/PPM | | 7.1/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | 1.5/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 89.6/ 1/1.6631 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.6/ 1/ .0459 |
| NOX SAMPLE METER/RANGE/PPM | | 80.9/ 1/ 20.3 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 8.05 |
| THC CONCENTRATION PPM | | 11. |
| CO CONCENTRATION PPM | | 1. |
| CO2 CONCENTRATION PCT | | 1.6229 |
| NOX CONCENTRATION PPM | | 20.2 |
| THC MASS GRAMS | | .71 |
| CO MASS GRAMS | | .19 |
| CO2 MASS GRAMS | | 3385.0 |
| NOX MASS GRAMS | | 4.05 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .876 ( .864) |
| SCF, WET (DRY) | | 1.000 ( .971) |
| VOL (SCM) | | 113.9 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.23 |
| TEST NUMBER, | | B1FBL1-01 |
| BAROMETER, | MM HG | 744.0 |
| HUMIDITY, | G/KG | 8.1 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 338.9 |
| FUEL ECONOMY, | MPG | 26.8 |
| HYDROCARBONS. (THC) | G/MI | .07 |
| CARBON MONOXIDE, | G/MI | .02 |
| OXIDES OF NITROGEN, | G/MI | .40 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FBL1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 743.71 MM HG(29.28 IN HG)
RELATIVE HUMIDITY 42. PCT

VEHICLE NO.95
DATE 1/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 8.1 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .92

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 47771. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.1 ( 3145.) |
| THC SAMPLE METER/RANGE/PPM | | 15.9/ 2/ 16. |
| THC BCKGRD METER/RANGE/PPM | | 6.8/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | | 6.6/ 12/ 7. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 86.1/ 14/ .7787 |
| CO2 BCKGRD METER/RANGE/PCT | | 12.9/ 14/ .0434 |
| NOX SAMPLE METER/RANGE/PPM | | 37.0/ 1/ 9.3 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 17.16 |
| THC CONCENTRATION PPM | | 9. |
| CO CONCENTRATION PPM | | 6. |
| CO2 CONCENTRATION PCT | | .7378 |
| NOX CONCENTRATION PPM | | 9.2 |
| THC MASS GRAMS | | .49 |
| CO MASS GRAMS | | .67 |
| CO2 MASS GRAMS | | 1203.0 |
| NOX MASS GRAMS | | 1.44 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .942 ( .929) |
| SCF, WET (DRY) | | 1.000 ( .979) |
| VOL (SCM) | | 89.1 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.19 |
| TEST NUMBER, | | B1FBL1-01 |
| BAROMETER, | MM HG | 743.7 |
| HUMIDITY, | G/KG | 8.1 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 1013.3 |
| FUEL ECONOMY, | MPG | 8.7 |
| HYDROCARBONS, (THC) | G/MI | .41 |
| CARBON MONOXIDE, | G/MI | .57 |
| OXIDES OF NITROGEN, | G/MI | 1.21 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-2346-001

TEST NO. B1FJM1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 12/27/90
BAG CART NO. 3 / CVS NO. 3
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 3. KM( 1. MILES)

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 38. PCT

DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 5.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR .85

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 800.1 (31.5) | 797.6 (31.4) | 795.8 (31.3) | 795.8 (31.3) |
| BLOWER INLET P MM. H20(IN. H20) | 795.0 (31.3) | 792.5 (31.2) | 789.9 (31.1) | 789.9 (31.1) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) | 41.1 (106.0) | 42.2 (108.0) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 40536. | 69514. | 40473. | 69432. |
| TOT FLOW STD. CU. METRES(SCF) | 75.8 ( 2675.) | 130.2 ( 4598.) | 75.7 ( 2673.) | 130.1 ( 4594.) |
| THC SAMPLE METER/RANGE/PPM | 31.5/ 2/ 31. | 7.7/ 2/ 8. | 10.3/ 2/ 10. | 8.1/ 2/ 8. |
| THC BCKGRD METER/RANGE/PPM | 7.1/ 2/ 7. | 7.0/ 2/ 7. | 6.8/ 2/ 7. | 6.7/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | 36.7/ 12/ 37. | .0/ 12/ 0. | 1.7/ 12/ 2. | .0/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 76.5/ 1/1.4123 | 91.9/ 14/ .9142 | 66.6/ 1/1.2255 | 91.2/ 14/ .8965 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0441 | 13.0/ 14/ .0438 | 2.5/ 1/ .0441 | 13.0/ 14/ .0438 |
| NOX SAMPLE METER/RANGE/PPM | 26.3/ 2/ 26.4 | 23.6/ 1/ 6.0 | 60.7/ 1/ 15.2 | 22.6/ 1/ 5.7 |
| NOX BCKGRD METER/RANGE/PPM | .1/ 2/ .1 | .3/ 1/ .1 | .2/ 1/ .1 | .2/ 1/ .1 |
| DILUTION FACTOR | 9.44 | 14.65 | 10.92 | 14.93 |
| THC CONCENTRATION PPM | 25. | 1. | 4. | 2. |
| CO CONCENTRATION PPM | 35. | 0. | 2. | 0. |
| CO2 CONCENTRATION PCT | 1.3728 | .8734 | 1.1854 | .8556 |
| NOX CONCENTRATION PPM | 26.3 | 5.9 | 15.2 | 5.7 |
| THC MASS GRAMS | 1.10 | .09 | .18 | .14 |
| CO MASS GRAMS | 3.10 | .00 | .15 | .00 |
| CO2 MASS GRAMS | 1904.1 | 2882.2 | 1642.7 | 2838.1 |
| NOX MASS GRAMS | 3.24 | 1.26 | 1.87 | 1.21 |
| THC GRAMS/MI | .30 | .02 | .05 | .04 |
| CO GRAMS/MI | .85 | .00 | .04 | .00 |
| CO2 GRAMS/MI | 520.9 | 534.2 | 455.6 | 521.4 |
| NOX GRAMS/MI | .89 | .32 | .52 | .31 |
| FUEL ECONOMY IN MPG | 16.95 16.77 | 16.60 | 19.46 18.10 | 17.00 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.66 7.55 | 3.90 | 3.61 7.51 | 3.91 |
| SCF, DRY | .977 .980 | .982 | .979 .981 | .982 |
| DFC, WET (DRY) | .918( .909) | | .924( .915) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 286.8/ .00 | | 285.8/ .00 | |

COMPOSITE RESULTS

| | | 3-BAG | (4-BAG |
|---|---|---|---|
| TEST NUMBER | B1FJM1-01 | | |
| BAROMETER | MM HG 746.8 | | |
| HUMIDITY | G/KG 5.5 | | |
| TEMPERATURE | DEG C 23.3 | | |
| CARBON DIOXIDE | G/MI | 509.9 | ( 506.2 |
| FUEL ECONOMY | MPG | 17.37 | ( 17.58 |
| HYDROCARBONS (THC) | G/MI | .09 | ( .09 |
| CARBON MONOXIDE | G/MI | .19 | ( .19 |
| OXIDES OF NITROGEN | G/MI | .49 | ( .49 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FJM1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 33. PCT

VEHICLE NO. 95
DATE 12/27/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 5.7 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .86

BAG RESULTS

| TEST CYCLE | HFET |
|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | 807.7 (31.8) |
| BLOWER INLET P MM. H2O(IN. H2O) | 797.6 (31.4) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 61268. |
| TOT FLOW STD. CU. METRES(SCF) | 114.4 ( 4039.) |
| THC SAMPLE METER/RANGE/PPM | 9.6/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 6.9/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | .0/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 87.8/ 1/1.6283 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0441 |
| NOX SAMPLE METER/RANGE/PPM | 53.7/ 1/ 13.5 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 1/ .1 |
| DILUTION FACTOR | 8.22 |
| THC CONCENTRATION PPM | 4. |
| CO CONCENTRATION PPM | 0. |
| CO2 CONCENTRATION PCT | 1.5895 |
| NOX CONCENTRATION PPM | 13.4 |
| THC MASS GRAMS | .25 |
| CO MASS GRAMS | .00 |
| CO2 MASS GRAMS | 3328.7 |
| NOX MASS GRAMS | 2.52 |
| RUN TIME SECONDS | 765. |
| DFC, WET (DRY) | .878 ( .869) |
| DCF, WET (DRY) | 1.000 ( .974) |
| VOL (SCM) | 114.4 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 10.25 |

| | | |
|---|---|---|
| TEST NUMBER, | | B1FJM1-01 |
| BAROMETER, | MM HG | 746.5 |
| HUMIDITY, | G/KG | 5.7 |
| TEMPERATURE, | DEG C | 22.8 |
| CARBON DIOXIDE, | G/MI | 324.8 |
| FUEL ECONOMY, | MPG | 27.3 |
| HYDROCARBONS, (THC) | G/MI | .02 |
| CARBON MONOXIDE, | G/MI | .00 |
| OXIDES OF NITROGEN, | G/MI | .25 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

NYCC - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B1FJM1-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.00 MM HG(29.37 IN HG)
RELATIVE HUMIDITY 30. PCT

VEHICLE NO.95
DATE 12/27/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 6.0 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .86

BAG RESULTS

| | |
|---|---|
| TEST CYCLE | NYCC |
| BLOWER DIF P MM. H20(IN. H20) | 795.0 (31.3) |
| BLOWER INLET P MM. H20(IN. H20) | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.1 (106.0) |
| BLOWER REVOLUTIONS | 47776. |
| TOT FLOW STD. CU. METRES(SCF) | 89.4 ( 3158.) |
| THC SAMPLE METER/RANGE/PPM | 12.6/ 2/ 13. |
| THC BCKGRD METER/RANGE/PPM | 6.9/ 2/ 7. |
| CO SAMPLE METER/RANGE/PPM | .2/ 12/ 0. |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 85.8/ 14/ .7723 |
| CO2 BCKGRD METER/RANGE/PCT | 12.9/ 14/ .0434 |
| NOX SAMPLE METER/RANGE/PPM | 27.5/ 1/ 7.0 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 1/ .1 |
| DILUTION FACTOR | 17.32 |
| THC CONCENTRATION PPM | 6. |
| CO CONCENTRATION PPM | 0. |
| CO2 CONCENTRATION PCT | .7314 |
| NOX CONCENTRATION PPM | 6.9 |
| THC MASS GRAMS | .31 |
| CO MASS GRAMS | .02 |
| CO2 MASS GRAMS | 1197.7 |
| NOX MASS GRAMS | 1.02 |
| RUN TIME SECONDS | 597. |
| DFC, WET (DRY) | .942 ( .933) |
| SCF, WET (DRY) | 1.000 ( .983) |
| VOL (SCM) | 89.4 |
| SAM BLR (SCM) | .00 |
| MI (MEASURED) | 1.20 |

| | | |
|---|---|---|
| TEST NUMBER, | | B1FJM1-01 |
| BAROMETER, | MM HG | 746.0 |
| HUMIDITY, | G/KG | 6.0 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 999.2 |
| FUEL ECONOMY, | MPG | 8.9 |
| HYDROCARBONS. (THC) | G/MI | .26 |
| CARBON MONOXIDE, | G/MI | .02 |
| OXIDES OF NITROGEN, | G/MI | .85 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

FTP - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B1FJM1-03 RUN | VEHICLE NO.95 | TEST WEIGHT 1928. KG( 4250. LBS)

VEHICLE MODEL 89 CROWN VICTORIA | DATE 1/ 2/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)

ENGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 / CVS NO. 2 | GASOLINE EM-1162-F

TRANSMISSION A4 | DYNO NO. 3 | ODOMETER 2. KM( 1. MILES)

BAROMETER 746.25 MM HG(29.38 IN HG) | DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)

RELATIVE HUMIDITY 44. PCT | ABS. HUMIDITY 8.3 GM/KG | NOX HUMIDITY CORRECTION FACTOR .93

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H20(IN. H20) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H20(IN. H20) | 789.9 (31.1) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 42.8 (109.0) | 41.7 (107.0) | 41.7 (107.0) | 42.2 (108.0) |
| BLOWER REVOLUTIONS | 40519. | 69500. | 40472. | 69475. |
| TOT FLOW STD. CU. METRES(SCF) | 75.6 ( 2671.) | 129.9 ( 4587.) | 75.6 ( 2671.) | 129.7 ( 4581.) |
| THC SAMPLE METER/RANGE/PPM | 29.1/ 2/ 29. | 9.7/ 2/ 10. | 11.8/ 2/ 12. | 10.3/ 2/ 10. |
| THC BCKGRD METER/RANGE/PPM | 8.8/ 2/ 9. | 8.9/ 2/ 9. | 9.1/ 2/ 9. | 9.0/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | 43.1/ 12/ 43. | 2.3/ 12/ 2. | 5.6/ 12/ 6. | 2.3/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | 2.3/ 12/ 2. | 2.5/ 12/ 3. | 2.2/ 12/ 2. | 2.3/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | 77.1/ 1/1.4236 | 92.2/ 14/ .9219 | 68.6/ 1/1.2631 | 91.3/ 14/ .8990 |
| CO2 BCKGRD METER/RANGE/PCT | 2.9/ 1/ .0512 | 14.8/ 14/ .0510 | 2.9/ 1/ .0512 | 15.0/ 14/ .0519 |
| NOX SAMPLE METER/RANGE/PPM | 99.2/ 1/ 24.7 | 25.2/ 1/ 6.4 | 58.6/ 1/ 14.7 | 23.2/ 1/ 5.9 |
| NOX BCKGRD METER/RANGE/PPM | .9/ 1/ .2 | .7/ 1/ .2 | .8/ 1/ .2 | .7/ 1/ .2 |
| DILUTION FACTOR | 9.37 | 14.52 | 10.59 | 14.88 |
| THC CONCENTRATION PPM | 21. | 1. | 4. | 2. |
| CO CONCENTRATION PPM | 39. | 0. | 3. | 0. |
| CO2 CONCENTRATION PCT | 1.3779 | .8744 | 1.2167 | .8506 |
| NOX CONCENTRATION PPM | 24.5 | 6.2 | 14.5 | 5.7 |
| THC MASS GRAMS | .93 | .11 | .16 | .14 |
| CO MASS GRAMS | 3.44 | -.01 | .33 | .02 |
| CO2 MASS GRAMS | 1908.1 | 2079.6 | 1685.2 | 2020.2 |
| NOX MASS GRAMS | 3.28 | 1.43 | 1.94 | 1.32 |
| THC GRAMS/MI | .25 | .03 | .04 | .04 |
| CO GRAMS/MI | .95 | -.00 | .08 | .00 |
| CO2 GRAMS/MI | 524.8 | 532.2 | 463.5 | 516.6 |
| NOX GRAMS/MI | .90 | .37 | .53 | .34 |
| FUEL ECONOMY IN MPG | 16.82 16.74 | 16.66 | 19.12 18.05 | 17.16 |
| RUN TIME SECONDS | 585. | 867. | 585. | 868. |
| MEASURED DISTANCE MI | 3.64 7.54 | 3.91 | 3.64 7.55 | 3.91 |
| SCF, DRY | .973 .975 | .977 | .974 .976 | .977 |
| DFC, WET (DRY) | .917( .904) | | .923( .910) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 205.5/ .00 | | 205.4/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | B1FJM1-03 | CARBON DIOXIDE | G/MI | 511.8 | ( 507.2) |
| BAROMETER | MM HG 746.3 | FUEL ECONOMY | MPG | 17.31 | ( 17.46) |
| HUMIDITY | G/KG 8.3 | HYDROCARBONS (THC) | G/MI | .08 | ( .08) |
| TEMPERATURE | DEG C 23.9 | CARBON MONOXIDE | G/MI | .22 | ( .22) |
| | | OXIDES OF NITROGEN | G/MI | .52 | ( .52) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FJM1-03 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 745.74 MM HG(29.36 IN HG)
RELATIVE HUMIDITY 42. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 8.5 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .93

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 812.8 (32.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 797.6 (31.4) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61251. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.3 ( 4036.) |
| THC SAMPLE METER/RANGE/PPM | | 11.3/ 2/ 11. |
| THC BCKGRD METER/RANGE/PPM | | 8.9/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | | 2.2/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | | 1.9/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 88.1/ 1/1.6341 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.7/ 1/ .0476 |
| NOX SAMPLE METER/RANGE/PPM | | 55.7/ 1/ 14.0 |
| NOX BCKGRD METER/RANGE/PPM | | .8/ 1/ .2 |
| DILUTION FACTOR | | 8.19 |
| THC CONCENTRATION PPM | | 3. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.5922 |
| NOX CONCENTRATION PPM | | 13.8 |
| THC MASS GRAMS | | .23 |
| CO MASS GRAMS | | .06 |
| CO2 MASS GRAMS | | 3332.4 |
| NOX MASS GRAMS | | 2.81 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .878 ( .866) |
| SCF, WET (DRY) | | 1.000 ( .971) |
| VOL (SCM) | | 114.3 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.18 |
| TEST NUMBER, | | B1FJM1-03 |
| BAROMETER, | MM HG | 745.7 |
| HUMIDITY, | G/KG | 8.5 |
| TEMPERATURE, | DEG C | 25.0 |
| CARBON DIOXIDE, | G/MI | 327.3 |
| FUEL ECONOMY, | MPG | 27.1 |
| HYDROCARBONS, (THC) | G/MI | .02 |
| CARBON MONOXIDE, | G/MI | .01 |
| OXIDES OF NITROGEN, | G/MI | .28 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FJM1-03 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 745.49 MM HG(29.35 IN HG)
RELATIVE HUMIDITY 42. PCT

VEHICLE NO. 95
DATE 1/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 8.1 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .92

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | NYCC |
| BLOWER DIF P MM. H2O(IN. H2O) | | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 47747. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.1 ( 3148.) |
| THC SAMPLE METER/RANGE/PPM | | 14.2/ 2/ 14. |
| THC BCKGRD METER/RANGE/PPM | | 8.9/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | | 2.3/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | | 1.8/ 12/ 2. |
| CO2 SAMPLE METER/RANGE/PCT | | 85.8/ 14/ .7723 |
| CO2 BCKGRD METER/RANGE/PCT | | 14.9/ 14/ .0515 |
| NOX SAMPLE METER/RANGE/PPM | | 25.6/ 1/ 6.5 |
| NOX BCKGRD METER/RANGE/PPM | | .7/ 1/ .2 |
| DILUTION FACTOR | | 17.31 |
| THC CONCENTRATION PPM | | 6. |
| CO CONCENTRATION PPM | | 1. |
| CO2 CONCENTRATION PCT | | .7238 |
| NOX CONCENTRATION PPM | | 6.3 |
| THC MASS GRAMS | | .30 |
| CO MASS GRAMS | | .06 |
| CO2 MASS GRAMS | | 1181.2 |
| NOX MASS GRAMS | | .99 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .942 ( .930) |
| SCF, WET (DRY) | | 1.000 ( .979) |
| VOL (SCM) | | 39.1 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.12 |
| TEST NUMBER, | | B1FJM1-03 |
| BAROMETER, | MM HG | 745.5 |
| HUMIDITY, | G/KG | 8.1 |
| TEMPERATURE, | DEG C | 24.4 |
| CARBON DIOXIDE, | G/MI | 1050.2 |
| FUEL ECONOMY, | MPG | 8.4 |
| HYDROCARBONS, (THC) | G/MI | .27 |
| CARBON MONOXIDE, | G/MI | .05 |
| OXIDES OF NITROGEN, | G/MI | .88 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

FTP - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B1FD-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 1/21/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 751.08 MM HG(29.57 IN HG)
RELATIVE HUMIDITY 16. PCT

DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 2.9 GM/KG

NOX HUMIDITY CORRECTION FACTOR .80

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 795.0 (31.3) | 810.3 (31.9) | 800.1 (31.5) | 810.3 (31.9) |
| BLOWER INLET P MM. H2O(IN. H2O) | 769.9 (31.1) | 800.1 (31.5) | 789.9 (31.1) | 800.1 (31.5) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) | 38.9 (102.0) | 41.7 (107.0) | 39.4 (103.0) |
| BLOWER REVOLUTIONS | 40496. | 69449. | 40436. | 69401. |
| TOT FLOW STD. CU. METRES(SCF) | 76.3 ( 2694.) | 131.3 ( 4637.) | 75.2 ( 2689.) | 131.1 ( 4629.) |
| THC SAMPLE METER/RANGE/PPM | 30.1/ 2/ 30. | 4.9/ 2/ 5. | 5.6/ 2/ 6. | 5.2/ 2/ 5. |
| THC BCKGRD METER/RANGE/PPM | 4.7/ 2/ 5. | 4.8/ 2/ 5. | 4.8/ 2/ 5. | 4.8/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | 43.7/ 12/ 43. | .1/ 12/ 0. | .0/ 12/ 0. | 1.9/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .0/ 12/ 0. | .0/ 12/ 0. | .0/ 12/ 0. | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 76.3/ 1/1.4385 | 31.3/ 14/ .8990 | 66.3/ 1/1.2199 | 90.4/ 14/ .8768 |
| CO2 BCKGRD METER/RANGE/PCT | 2.4/ 1/ .0423 | 12.4/ 14/ .0415 | 2.4/ 1/ .0423 | 12.6/ 14/ .0422 |
| NOX SAMPLE METER/RANGE/PPM | 78.9/ 1/ 19.8 | 7.2/ 1/ 1.9 | 46.2/ 1/ 11.6 | 3.6/ 1/ .9 |
| NOX BCKGRD METER/RANGE/PPM | .0/ 1/ .0 | .0/ 1/ .0 | .0/ 1/ .0 | .0/ 1/ .0 |
| DILUTION FACTOR | 9.47 | 14.90 | 10.98 | 15.27 |
| THC CONCENTRATION PPM | 25. | 0. | 1. | 1. |
| CO CONCENTRATION PPM | 42. | 0. | 0. | 2. |
| CO2 CONCENTRATION PCT | 1.3706 | .8603 | 1.1814 | .8373 |
| NOX CONCENTRATION PPM | 19.8 | 1.9 | 11.6 | .9 |
| THC MASS GRAMS | 1.14 | .03 | .05 | .05 |
| CO MASS GRAMS | 3.74 | .22 | .00 | .27 |
| CO2 MASS GRAMS | 1914.6 | 2068.6 | 1647.4 | 2009.5 |
| NOX MASS GRAMS | 2.30 | .38 | 1.34 | .19 |
| THC GRAMS/MI | .32 | .01 | .02 | .01 |
| CO GRAMS/MI | 1.04 | .00 | .00 | .07 |
| CO2 GRAMS/MI | 533.7 | 532.9 | 458.3 | 514.4 |
| NOX GRAMS/MI | .64 | .10 | .37 | .05 |
| FUEL ECONOMY IN MPG | 16.53 16.59 | 16.64 | 19.35 18.19 | 17.23 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.59 7.47 | 3.88 | 3.59 7.50 | 3.91 |
| SCF. DRY | .982 .985 | .987 | .984 .986 | .987 |
| DFC. WET (DRY) | .919( .914) | | .925( .920) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 207.6/ .00 | | 207.3/ .00 | |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1FD-01 |
| BAROMETER | MM HG | 751.1 |
| HUMIDITY | G/KG | 2.9 |
| TEMPERATURE | DEG C | 23.9 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 512.6 | ( 507.2) |
| FUEL ECONOMY | MPG | 17.28 | ( 17.46) |
| HYDROCARBONS (THC) | G/MI | .07 | ( .08) |
| CARBON MONOXIDE | G/MI | .22 | ( .24) |
| OXIDES OF NITROGEN | G/MI | .28 | ( .27) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FD-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 751.59 MM HG(29.59 IN HG)
RELATIVE HUMIDITY 18. PCT

VEHICLE NO.95
DATE 1/21/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 3.6 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .81

BAG RESULTS

| | | |
|---|---|---|
| TEST CYCLE | | HFET |
| BLOWER DIF P MM. H2O(IN. H2O) | | 812.8 (32.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 810.3 (31.9) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61247. |
| TOT FLOW STD. CU. METRES(SCF) | | 115.1 ( 4066.) |
| THC SAMPLE METER/RANGE/PPM | | 5.9/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | | 4.8/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | | 17.1/ 12/ 17. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 89.0/ 1/1.6515 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.4/ 1/ .0423 |
| NOX SAMPLE METER/RANGE/PPM | | 57.8/ 1/ 14.5 |
| NOX BCKGRD METER/RANGE/PPM | | .0/ 1/ .0 |
| DILUTION FACTOR | | 8.10 |
| THC CONCENTRATION PPM | | 2. |
| CO CONCENTRATION PPM | | 16. |
| CO2 CONCENTRATION PCT | | 1.6144 |
| NOX CONCENTRATION PPM | | 14.5 |
| THC MASS GRAMS | | .11 |
| CO MASS GRAMS | | 2.21 |
| CO2 MASS GRAMS | | 3403.2 |
| NOX MASS GRAMS | | 2.58 |
| RUN TIME | SECONDS | 765. |
| DFC, WET (DRY) | | .377 ( .372) |
| DCF, WET (DRY) | | 1.000 ( .979) |
| VOL (SCM) | | 115.1 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.20 |

| | | |
|---|---|---|
| TEST NUMBER. | | B1FD-01 |
| BAROMETER. | MM HG | 751.6 |
| HUMIDITY. | G/KG | 3.6 |
| TEMPERATURE. | DEG C | 25.0 |
| CARBON DIOXIDE. | G/MI | 333.6 |
| FUEL ECONOMY. | MPG | 26.5 |
| HYDROCARBONS. (THC) | G/MI | .01 |
| CARBON MONOXIDE. | G/MI | .22 |
| OXIDES OF NITROGEN. | G/MI | .25 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

NYCC - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B1FD-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 751.59 MM HG(29.59 IN HG)
RELATIVE HUMIDITY 20. PCT

VEHICLE NO.95
DATE 1/21/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 3.4 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .81

BAG RESULTS

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 789.9 (31.1) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 784.9 (30.9) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.1 (106.0) |
| BLOWER REVOLUTIONS | | 47836. |
| TOT FLOW STD. CU. METRES(SCF) | | 90.3 ( 3190.) |
| THC SAMPLE METER/RANGE/PPM | | 5.6/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | | 5.4/ 2/ 5. |
| CO SAMPLE METER/RANGE/PPM | | .5/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 86.0/ 14/ .7765 |
| CO2 BCKGRD METER/RANGE/PCT | | 12.8/ 14/ .0430 |
| NOX SAMPLE METER/RANGE/PPM | | 13.9/ 1/ 3.6 |
| NOX BCKGRD METER/RANGE/PPM | | .3/ 1/ .1 |
| DILUTION FACTOR | | 17.24 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .7360 |
| NOX CONCENTRATION PPM | | 3.5 |
| THC MASS GRAMS | | .03 |
| CO MASS GRAMS | | .04 |
| CO2 MASS GRAMS | | 1217.5 |
| NOX MASS GRAMS | | .49 |
| RUN TIME | SECONDS | 597. |
| DFC, WET (DRY) | | .942 ( .936) |
| SCF, WET (DRY) | | 1.000 ( .986) |
| VOL (SCM) | | 90.3 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.17 |
| TEST NUMBER, | | B1FD-01 |
| BAROMETER, | MM HG | 751.6 |
| HUMIDITY, | G/KG | 3.4 |
| TEMPERATURE, | DEG C | 22.8 |
| CARBON DIOXIDE, | G/MI | 1043.2 |
| FUEL ECONOMY, | MPG | 8.5 |
| HYDROCARBONS, (THC) | G/MI | .02 |
| CARBON MONOXIDE, | G/MI | .04 |
| OXIDES OF NITROGEN, | G/MI | .42 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH

FTP - VEHICLE EMISSIONS RESULTS -

PROJECT 08-2346-001

TEST NO. B1FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO. 95
DATE 1/22/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1588. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)

BAROMETER 747.78 MM HG(29.44 IN HG)
RELATIVE HUMIDITY 26. PCT

DRY BULB TEMP. 24.4 DEG C(75.0 DEG F)
ABS. HUMIDITY 5.0 GM/KG

NOX HUMIDITY CORRECTION FACTOR .84

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 795.0 (31.3) | 805.2 (31.7) | 800.1 (31.5) | 800.1 (31.5) |
| BLOWER INLET P MM. H2O(IN. H2O) | 789.9 (31.1) | 795.0 (31.3) | 795.0 (31.3) | 795.0 (31.3) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 41.7 (107.0) | 39.4 (103.0) | 41.1 (106.0) | 40.0 (104.0) |
| BLOWER REVOLUTIONS | 40468. | 69440. | 40442. | 69388. |
| TOT FLOW STD. CU. METRES(SCF) | 75.9 ( 2678.) | 130.6 ( 4612.) | 75.8 ( 2678.) | 130.4 ( 4604.) |
| THC SAMPLE METER/RANGE/PPM | 41.8/ 2/ 42. | 5.8/ 2/ 6. | 6.4/ 2/ 6. | 5.6/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | 5.2/ 2/ 5. | 5.7/ 2/ 6. | 6.2/ 2/ 6. | 5.7/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | 75.5/ 12/ 75. | .7/ 12/ 1. | .5/ 12/ 1. | 1.6/ 12/ 2. |
| CO BCKGRD METER/RANGE/PPM | .4/ 12/ 0. | .3/ 12/ 0. | .0/ 12/ 0. | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | 77.4/ 1/1.4293 | 91.5/ 14/ .9040 | 66.5/ 1/1.2236 | 90.7/ 14/ .8841 |
| CO2 BCKGRD METER/RANGE/PCT | 2.7/ 1/ .0476 | 13.6/ 14/ .0462 | 2.7/ 1/ .0476 | 13.3/ 14/ .0450 |
| NOX SAMPLE METER/RANGE/PPM | 77.9/ 1/ 19.5 | 4.2/ 1/ 1.1 | 27.1/ 1/ 6.9 | 9.4/ 1/ 2.4 |
| NOX BCKGRD METER/RANGE/PPM | .5/ 1/ .1 | .5/ 1/ .1 | .5/ 1/ .1 | .5/ 1/ .1 |
| DILUTION FACTOR | 9.30 | 14.81 | 10.95 | 15.14 |
| THC CONCENTRATION PPM | 36. | 0. | 1. | 0. |
| CO CONCENTRATION PPM | 72. | 3. | 3. | 1. |
| CO2 CONCENTRATION PCT | 1.3868 | .8610 | 1.1803 | .8421 |
| NOX CONCENTRATION PPM | 19.4 | 1.0 | 6.7 | 2.3 |
| THC MASS GRAMS | 1.59 | .04 | .03 | .02 |
| CO MASS GRAMS | 6.39 | .06 | .04 | .03 |
| CO2 MASS GRAMS | 1926.0 | 2058.9 | 1638.9 | 2010.3 |
| NOX MASS GRAMS | 2.37 | .21 | .62 | .49 |
| THC GRAMS/MI | .44 | .01 | .01 | .01 |
| CO GRAMS/MI | 1.78 | .02 | .01 | .06 |
| CO2 GRAMS/MI | 536.5 | 530.3 | 456.7 | 518.1 |
| NOX GRAMS/MI | .66 | .05 | .23 | .13 |
| FUEL ECONOMY IN MPG | 16.40 16.57 | 16.72 | 19.42 18.15 | 17.11 |
| RUN TIME SECONDS | 505. | 867. | 505. | 867. |
| MEASURED DISTANCE MI | 3.59 7.47 | 3.88 | 3.59 7.47 | 3.88 |
| SCF. DRY | .978 .982 | .983 | .980 .982 | .983 |
| DFC. WET (DRY) | .918( .910) | | .925( .917) | |
| TOT VOL (SCM) / SAM BLR (SCM) | 206.5/ .00 | | 206.2/ .00 | |

COMPOSITE RESULTS

| | | | 3-BAG | (4-BAG) |
|---|---|---|---|---|
| TEST NUMBER | B1FD-02 | CARBON DIOXIDE | G/MI | 511.4 | ( 507.8) |
| BAROMETER | MM HG 747.8 | FUEL ECONOMY | MPG | 17.31 | ( 17.43) |
| HUMIDITY | G/KG 5.0 | HYDROCARBONS (THC) | G/MI | .10 | ( .10) |
| TEMPERATURE | DEG C 24.4 | CARBON MONOXIDE | G/MI | .38 | ( .39) |
| | | OXIDES OF NITROGEN | G/MI | .23 | ( .25) |

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 747.81 MM HG(29.41 IN HG)
RELATIVE HUMIDITY 29. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/22/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 5.6 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .86

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 812.8 (32.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 810.3 (31.9) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.7 (107.0) |
| BLOWER REVOLUTIONS | | 61235. |
| TOT FLOW STD. CU. METRES(SCF) | | 114.3 ( 4037.) |
| THC SAMPLE METER/RANGE/PPM | | 6.0/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | | 5.8/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | | 16.0/ 12/ 16. |
| CO BCKGRD METER/RANGE/PPM | | .0/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 88.8/ 1/1.6476 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.6/ 1/ .0459 |
| NOX SAMPLE METER/RANGE/PPM | | 41.2/ 1/ 10.3 |
| NOX BCKGRD METER/RANGE/PPM | | .3/ 1/ .1 |
| DILUTION FACTOR | | 8.12 |
| THC CONCENTRATION PPM | | 1. |
| CO CONCENTRATION PPM | | 15. |
| CO2 CONCENTRATION PCT | | .6074 |
| NOX CONCENTRATION PPM | | 10.3 |
| THC MASS GRAMS | | .06 |
| CO MASS GRAMS | | 2.05 |
| CO2 MASS GRAMS | | 3364.9 |
| NOX MASS GRAMS | | 1.92 |
| RUN TIME | SECONDS | 765. |
| DFC. WET (DRY) | | .877 ( .869) |
| SCF. WET (DRY) | | 1.000 ( .975) |
| VOL (SCM) | | 114.3 |
| BAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.19 |
| TEST NUMBER. | | B1FD-02 |
| BAROMETER. | MM HG | 747.8 |
| HUMIDITY. | G/KG | 5.6 |
| TEMPERATURE. | DEG C | 24.4 |
| CARBON DIOXIDE. | G/MI | 330.2 |
| FUEL ECONOMY. | MPG | 26.8 |
| HYDROCARBONS. (THC) | G/MI | .01 |
| CARBON MONOXIDE. | G/MI | .20 |
| OXIDES OF NITROGEN. | G/MI | .19 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2346-001

TEST NO. B1FD-02 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 24. PCT
BAG RESULTS

VEHICLE NO.95
DATE 1/22/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 4.8 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1162-F
ODOMETER 2. KM( 1. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .84

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 795.0 (31.3) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 787.4 (31.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 41.1 (106.0) |
| BLOWER REVOLUTIONS | | 47728. |
| TOT FLOW STD. CU. METRES(SCF) | | 89.5 ( 3159.) |
| THC SAMPLE METER/RANGE/PPM | | 5.9/ 2/ 6. |
| THC BCKGRD METER/RANGE/PPM | | 5.8/ 2/ 6. |
| CO SAMPLE METER/RANGE/PPM | | .6/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .3/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 85.5/ 14/ .7659 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.1/ 14/ .0442 |
| NOX SAMPLE METER/RANGE/PPM | | 11.7/ 1/ 3.0 |
| NOX BCKGRD METER/RANGE/PPM | | .5/ 1/ .1 |
| DILUTION FACTOR | | 17.48 |
| THC CONCENTRATION PPM | | 0. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | .7243 |
| NOX CONCENTRATION PPM | | 2.9 |
| THC MASS GRAMS | | .02 |
| CO MASS GRAMS | | .03 |
| CO2 MASS GRAMS | | 1186.3 |
| NOX MASS GRAMS | | .41 |
| RUN TIME | SECONDS | 596. |
| DFD. WET (DRY) | | .943 ( .936) |
| DCF. WET (DRY) | | 1.000 ( .985) |
| VOL (SCM) | | 89.5 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.18 |
| TEST NUMBER. | | B1FD-02 |
| BAROMETER. | MM HG | 746.8 |
| HUMIDITY. | G/KG | 4.8 |
| TEMPERATURE. | DEG C | 25.0 |
| CARBON DIOXIDE. | G/MI | 1001.8 |
| FUEL ECONOMY. | MPG | 8.9 |
| HYDROCARBONS. (THC) | G/MI | .02 |
| CARBON MONOXIDE. | G/MI | .03 |
| OXIDES OF NITROGEN. | G/MI | .35 |

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3381-001

TEST NO. B1FHC-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

VEHICLE NO.95
DATE 5/ 6/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1235-F
ODOMETER 0. KM( 0. MILES)

BAROMETER 746.25 MM HG(29.38 IN HG)
RELATIVE HUMIDITY 36. PCT

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 6.3 GM/KG

NOX HUMIDITY CORRECTION FACTOR .87

BAG RESULTS

| BAG NUMBER | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DESCRIPTION | COLD TRANSIENT | STABILIZED | HOT TRANSIENT | STABILIZED |
| BLOWER DIF P MM. H2O(IN. H2O) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | 39.4 (103.0) | 37.8 (100.0) | 38.9 (102.0) | 40.6 (105.0) |
| BLOWER REVOLUTIONS | 40205. | 68946. | 40107. | 68727. |
| TOT FLOW STD. CU. METRES(SCF) | 73.6 ( 2599.) | 126.9 ( 4481.) | 73.5 ( 2597.) | 125.3 ( 4424.) |
| THC SAMPLE METER/RANGE/PPM | 36.4/ 2/ 36. | 12.4/ 2/ 12. | 14.8/ 2/ 15. | 11.9/ 2/ 12. |
| THC BCKGRD METER/RANGE/PPM | 9.1/ 2/ 9. | 8.5/ 2/ 8. | 7.6/ 2/ 8. | 7.7/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | 23.1/ 12/ 23. | .5/ 12/ 1. | 1.6/ 12/ 2. | .5/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | .6/ 12/ 1. | .4/ 12/ 0. | .5/ 12/ 1. | .5/ 12/ 1. |
| CO2 SAMPLE METER/RANGE/PCT | 79.8/ 1/1.4754 | 92.6/ 14/ .9323 | 69.6/ 1/1.2869 | 92.1/ 14/ .9193 |
| CO2 BCKGRD METER/RANGE/PCT | 2.5/ 1/ .0437 | 12.5/ 14/ .0418 | 2.6/ 1/ .0455 | 13.3/ 14/ .0450 |
| NOX SAMPLE METER/RANGE/PPM | 28.8/ 2/ 28.9 | 35.3/ 1/ 8.9 | 72.3/ 1/ 18.1 | 37.9/ 1/ 9.5 |
| NOX BCKGRD METER/RANGE/PPM | .2/ 2/ .2 | .3/ 1/ .1 | .9/ 1/ .2 | .9/ 1/ .2 |
| DILUTION FACTOR | 9.05 | 14.35 | 10.40 | 14.56 |
| THC CONCENTRATION PPM | 28. | 4. | 8. | 5. |
| CO CONCENTRATION PPM | 22. | 0. | 1. | 0. |
| CO2 CONCENTRATION PCT | 1.4365 | .8934 | 1.2458 | .8774 |
| NOX CONCENTRATION PPM | 28.7 | 8.8 | 17.9 | 9.3 |
| THC MASS GRAMS | 1.20 | .33 | .34 | .34 |
| CO MASS GRAMS | 1.85 | .02 | .10 | .00 |
| CO2 MASS GRAMS | 1935.7 | 2075.8 | 1677.3 | 2012.9 |
| NOX MASS GRAMS | 3.53 | 1.87 | 2.20 | 1.95 |
| THC GRAMS/MI | .34 | .09 | .09 | .09 |
| CO GRAMS/MI | .52 | .00 | .03 | .00 |
| CO2 GRAMS/MI | 541.6 | 537.2 | 469.1 | 523.9 |
| NOX GRAMS/MI | .99 | .48 | .62 | .51 |
| FUEL ECONOMY IN MPG | 16.32 | 16.41 16.50 | 18.89 | 17.81 16.92 |
| RUN TIME SECONDS | 505. | 868. | 506. | 867. |
| MEASURED DISTANCE MI | 3.57 | 7.44 3.86 | 3.58 | 7.42 3.84 |
| SCF, DRY | .975 | .978 .980 | .976 | .979 .980 |
| DFC, WET (DRY) | | .915( .905) | | .921( .910) |
| TOT VOL (SCM) / SAM BLR (SCM) | | 200.5/ .00 | | 198.8/ .00 |

COMPOSITE RESULTS

| | | |
|---|---|---|
| TEST NUMBER | | B1FHC-01 |
| BAROMETER | MM HG | 746.3 |
| HUMIDITY | G/KG | 6.3 |
| TEMPERATURE | DEG C | 22.8 |

| | | 3-BAG | (4-BAG) |
|---|---|---|---|
| CARBON DIOXIDE | G/MI | 519.5 | ( 515.5) |
| FUEL ECONOMY | MPG | 17.05 | ( 17.18) |
| HYDROCARBONS (THC) | G/MI | .14 | ( .14) |
| CARBON MONOXIDE | G/MI | .12 | ( .12) |
| OXIDES OF NITROGEN | G/MI | .62 | ( .63) |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3381-001

TEST NO. B1FHC-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 746.00 MM HG(29.37 IN HG)
RELATIVE HUMIDITY 39. PCT

VEHICLE NO.95
DATE 5/ 6/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 6.6 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1235-F
ODOMETER 0. KM( 0. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .88

BAG RESULTS

| TEST CYCLE | | HFET |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 60594. |
| TOT FLOW STD. CU. METRES(SCF) | | 109.8 ( 3877.) |
| THC SAMPLE METER/RANGE/PPM | | 13.6/ 2/ 14. |
| THC BCKGRD METER/RANGE/PPM | | 7.8/ 2/ 8. |
| CO SAMPLE METER/RANGE/PPM | | .6/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .1/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 93.3/ 1/1.7355 |
| CO2 BCKGRD METER/RANGE/PCT | | 2.5/ 1/ .0437 |
| NOX SAMPLE METER/RANGE/PPM | | 77.2/ 1/ 19.3 |
| NOX BCKGRD METER/RANGE/PPM | | .7/ 1/ .2 |
| DILUTION FACTOR | | 7.71 |
| THC CONCENTRATION PPM | | 7. |
| CO CONCENTRATION PPM | | 0. |
| CO2 CONCENTRATION PCT | | 1.6975 |
| NOX CONCENTRATION PPM | | 19.2 |
| THC MASS GRAMS | | .43 |
| CO MASS GRAMS | | .06 |
| CO2 MASS GRAMS | | 3412.6 |
| NOX MASS GRAMS | | 3.54 |
| RUN TIME | SECONDS | 766. |
| DFC, WET (DRY) | | .870 ( .860) |
| SCF, WET (DRY) | | 1.000 ( .971) |
| VOL (SCM) | | 109.8 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 10.17 |
| TEST NUMBER, | | B1FHC-01 |
| BAROMETER, | MM HG | 746.0 |
| HUMIDITY, | G/KG | 6.6 |
| TEMPERATURE, | DEG C | 22.2 |
| CARBON DIOXIDE, | G/MI | 335.4 |
| FUEL ECONOMY, | MPG | 26.4 |
| HYDROCARBONS, (THC) | G/MI | .04 |
| CARBON MONOXIDE, | G/MI | .01 |
| OXIDES OF NITROGEN, | G/MI | .35 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3381-001

TEST NO. B1FHC-01 RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 745.74 MM HG(29.36 IN HG)
RELATIVE HUMIDITY 43. PCT

VEHICLE NO.95
DATE 5/ 6/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 7.5 GM/KG

TEST WEIGHT 1928. KG( 4250. LBS)
ACTUAL ROAD LOAD 9.4 KW( 12.6 HP)
GASOLINE EM-1235-F
ODOMETER 0. KM( 0. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .91

BAG RESULTS

| TEST CYCLE | | NYCC |
|---|---|---|
| BLOWER DIF P MM. H2O(IN. H2O) | | 1066.8 (42.0) |
| BLOWER INLET P MM. H2O(IN. H2O) | | 1117.6 (44.0) |
| BLOWER INLET TEMP. DEG. C(DEG. F) | | 42.2 (108.0) |
| BLOWER REVOLUTIONS | | 47478. |
| TOT FLOW STD. CU. METRES(SCF) | | 86.0 ( 3037.) |
| THC SAMPLE METER/RANGE/PPM | | 16.6/ 2/ 17. |
| THC BCKGRD METER/RANGE/PPM | | 8.9/ 2/ 9. |
| CO SAMPLE METER/RANGE/PPM | | 1.1/ 12/ 1. |
| CO BCKGRD METER/RANGE/PPM | | .4/ 12/ 0. |
| CO2 SAMPLE METER/RANGE/PCT | | 87.1/ 14/ .8004 |
| CO2 BCKGRD METER/RANGE/PCT | | 13.4/ 14/ .0454 |
| NOX SAMPLE METER/RANGE/PPM | | 35.8/ 1/ 9.0 |
| NOX BCKGRD METER/RANGE/PPM | | .6/ 1/ .2 |
| DILUTION FACTOR | | 16.71 |
| THC CONCENTRATION PPM | | 8. |
| CO CONCENTRATION PPM | | 1. |
| CO2 CONCENTRATION PCT | | .7577 |
| NOX CONCENTRATION PPM | | 8.9 |
| THC MASS GRAMS | | .41 |
| CO MASS GRAMS | | .07 |
| CO2 MASS GRAMS | | 1193.0 |
| NOX MASS GRAMS | | 1.32 |
| RUN TIME | SECONDS | 600. |
| DFC, WET (DRY) | | .940 ( .927) |
| SCF, WET (DRY) | | 1.000 ( .979) |
| VOL (SCM) | | 86.0 |
| SAM BLR (SCM) | | .00 |
| MI (MEASURED) | | 1.15 |
| TEST NUMBER, | | B1FHC-01 |
| BAROMETER, | MM HG | 745.7 |
| HUMIDITY, | G/KG | 7.5 |
| TEMPERATURE, | DEG C | 22.8 |
| CARBON DIOXIDE, | G/MI | 1038.2 |
| FUEL ECONOMY, | MPG | 8.5 |
| HYDROCARBONS, (THC) | G/MI | .36 |
| CARBON MONOXIDE, | G/MI | .06 |
| OXIDES OF NITROGEN, | G/MI | 1.15 |

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3381-001

| | | | |
|---|---|---|---|
| TEST | TEST NO. B1FHC-02 RUN | VEHICLE NO.95 | TEST WEIGHT 1928. KG( 4250. LBS) |
| VEHI | VEHICLE MODEL 89 CROWN VICTORIA | DATE 5/ 7/91 | ACTUAL ROAD LOAD 9.4 KW( 12.6 HP) |
| ENGI | ENGINE 4.9 L(302. CID) V-8 | BAG CART NO. 2 | GASOLINE EM-1235-F |
| TRAN | TRANSMISSION A4 | DYNO NO. 3 | ODOMETER 0. KM( 0. MILES) |
| | | CVS NO. 2 | C = .866 H = .134 O = .000 |
| BARO | BAROMETER 742.19 MM HG(29.22 IN HG) | DRY BULB TEMP. 24.4 DEG C(76.0 DEG F) | FUEL DENSITY = 6.16 |
| RELA | RELATIVE HUMIDITY 52. PCT | ABS. HUMIDITY 10.2 GM/KG | NOX HUMIDITY CORRECTION FACTOR .98 |

BAG BAG RESULTS

| | | |
|---|---|---|
| B | TEST CYCLE | NYCC |
| D | | |
| | BLOWER DIF P MM. H2O(IN. H2O) | 1066.8 (42.0) |
| B | BLOWER INLET P MM. H2O(IN. H2O) | 1117.6 (44.0) |
| B | BLOWER INLET TEMP. DEG. C(DEG. F) | 43.3 (110.0) |
| B | BLOWER REVOLUTIONS | 47419. |
| B | TOT FLOW STD. CU. METRES(SCF) | 85.1 ( 3005.) |
| T | THC SAMPLE METER/RANGE/PPM | 19.5/ 2/ 19. |
| T | THC BCKGRD METER/RANGE/PPM | 12.9/ 2/ 13. |
| T | CO SAMPLE METER/RANGE/PPM | 1.9/ 12/ 2. |
| C | CO BCKGRD METER/RANGE/PPM | 1.0/ 12/ 1. |
| C | CO2 SAMPLE METER/RANGE/PPM | 88.2/ 14/ .8250 |
| C | CO2 BCKGRD METER/RANGE/PPM | 14.5/ 14/ .0498 |
| C | NOX SAMPLE METER/RANGE/PPM | 34.7/ 1/ 8.7 |
| N | NOX BCKGRD METER/RANGE/PPM | .8/ 1/ .2 |
| N | DILUTION FACTOR | 16.20 |
| N | THC CONCENTRATION PPM | 7. |
| | CO CONCENTRATION PPM | 1. |
| | CO2 CONCENTRATION PCT | .7782 |
| | NOX CONCENTRATION PPM | 8.5 |
| | THC MASS GRAMS | .36 |
| | CO MASS GRAMS | .09 |
| | CO2 MASS GRAMS | 1212.7 |
| | NOX MASS GRAMS | 1.37 |
| | RUN TIME SECONDS | 598. |
| | DFC, WET (DRY) | .938 ( .923) |
| | SCF, WET (DRY) | 1.000 ( .976) |
| | VOL (SCM) | 85.1 |
| | SAM BLR (SCM) | .00 |
| | MI (MEASURED) | 1.15 |
| | TEST NUMBER, | B1FHC-02 |
| | BAROMETER, MM HG | 742.2 |
| | HUMIDITY, G/KG | 10.2 |
| | TEMPERATURE, DEG C | 24.4 |
| | CARBON DIOXIDE, G/MI | 1051.4 |
| | FUEL ECONOMY, MPG | 8.4 |

COM

| | | |
|---|---|---|
| | HYDROCARBONS, (THC) G/MI | .31 |
| | CARBON MONOXIDE, G/MI | .08 |
| | OXIDES OF NITROGEN, G/MI | 1.19 |