APPENDIX K

COMPUTER PRINTOUT AND HYDROCARBON SPECIATION DATA FOR TEST NO. B2FDC-01S

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B2FDC-01S RUN
VEHICLE MODEL 89 CROWN VICTORIA
ENGINE 4.9 L(302. CID) V-8
TRANSMISSION A4

BAROMETER 739.65 MM HG(29.12 IN HG)
RELATIVE HUMIDITY 51. PCT

VEHICLE NO.95
DATE 6/18/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 27.2 DEG C(81.0 DEG F)
ABS. HUMIDITY 12.0 GM/KG

TEST WEIGHT 1928. KG(4250. LBS)
ACTUAL ROAD LOAD 9.4 KW(12.6 HP)
METHANOL EM-1170-F
ODOMETER 0. KM(0. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.04

BAG RESULTS

BAG NUMBER	1	2	3
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT
BLOWER DIF P MM. H2O(IN. H2O)	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)
BLOWER INLET TEMP. DEG. C(DEG. F)	41.7 (107.0)	41.7 (107.0)	42.2 (108.0)
BLOWER REVOLUTIONS	39995.	68427.	39998.
TOT FLOW STD. CU. METRES(SCF)	71.9 (2539.)	123.0 (4343.)	71.8 (2534.)
THC SAMPLE METER/RANGE/PPM	38.6/ 2/ 39.	8.9/ 2/ 9.	8.1/ 2/ 8.
THC BCKGRD METER/RANGE/PPM	8.5/ 2/ 8.	9.6/ 2/ 10.	7.7/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	83.0/ 13/ 202.	1.2/ 12/ 1.	1.2/ 12/ 1.
CO BCKGRD METER/RANGE/PPM	.5/ 13/ 1.	1.0/ 12/ 1.	1.1/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	77.5/ 1/1.4325	91.6/ 14/ .9066	66.9/ 1/1.2374
CO2 BCKGRD METER/RANGE/PCT	3.3/ 1/ .0579	16.3/ 14/ .0573	2.8/ 1/ .0490
NOX SAMPLE METER/RANGE/PPM	39.9/ 1/ 10.0	18.0/ 1/ 4.6	43.0/ 1/ 10.8
NOX BCKGRD METER/RANGE/PPM	2.0/ 1/ .5	2.3/ 1/ .6	2.1/ 1/ .6
DILUTION FACTOR	8.18	13.12	9.62
THC CONCENTRATION PPM	31.	0.	1.
CO CONCENTRATION PPM	190.	0.	0.
CO2 CONCENTRATION PCT	1.3817	.8536	1.1935
NOX CONCENTRATION PPM	9.6	4.0	10.3
THC MASS GRAMS	2.56	.00	.10
CO MASS GRAMS	15.90	.04	.01
CO2 MASS GRAMS	1818.9	1922.0	1568.4
NOX MASS GRAMS	1.37	.99	1.48
THC GRAMS/MI	.72	.00	.03
CO GRAMS/MI	4.46	.01	.00
CO2 GRAMS/MI	510.4	502.8	439.0
NOX GRAMS/MI	.39	.26	.41
FUEL ECONOMY IN MPG	9.17	9.46	10.83
RUN TIME SECONDS	505.	867.	504.
MEASURED DISTANCE MI	3.56	3.82	3.57
SCF, DRY	.958	.968	.962

COMPOSITE RESULTS

TEST NUMBER		B2FDC-01S
BAROMETER	MM HG	739.6
HUMIDITY	G/KG	12.0
TEMPERATURE	DEG C	27.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	486.8	(.0)
FUEL ECONOMY	MPG	9.73	(.00)
HYDROCARBONS (THC)	G/MI	.16	(.00)
CARBON MONOXIDE	G/MI	.93	(.00)
OXIDES OF NITROGEN	G/MI	.33	(.00)

SUMMARY OF HYDROCARBON SPECIATION DATA FOR TEST NO. B2FDC-01S

COMPOUND	BAG 1			BAG 2			BAG 3			FTP TOTAL		FTP OZONE
	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG/MI	WGT. %	MG/MI
METHANOL	1826	513.0	69.95	0	0.0	0.00	0	0.0	0.00	106.4	66.88	148.98
METHANE	120	33.8	4.61	1	0.2	2.88	18	5.1	46.76	8.5	5.36	0.09
ETHYLENE	13	3.6	0.49	0	0.0	0.37	1	0.4	3.47	0.9	0.54	4.54
ETHANE	18	5.0	0.68	0	0.0	0.60	0	0.0	0.00	1.1	0.66	0.16
ACETYLENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
PROPANE	6	1.6	0.22	0	0.0	0.00	0	0.0	0.00	0.3	0.21	0.11
PROPYLENE	4	1.1	0.14	0	0.0	0.00	0	0.0	0.00	0.2	0.14	1.45
1,3-BUTADIENE	1	0.2	0.03	0	0.0	0.00	0	0.0	0.00	0.0	0.03	0.36
ISOBUTANE	6	1.7	0.23	1	0.3	3.87	0	0.0	0.00	0.5	0.32	0.43
BUTANE	22	6.1	0.83	15	3.9	50.61	0	0.0	0.00	3.3	2.06	2.10
1-BUTENE	2	0.6	0.08	0	0.0	0.00	0	0.0	0.00	0.1	0.08	0.75
ISOBUTYLENE	5	1.3	0.18	0	0.0	0.00	0	0.0	0.00	0.3	0.17	1.14
CIS-2-BUTENE	5	1.4	0.19	0	0.0	0.00	0	0.0	0.00	0.3	0.18	2.14
TRANS-2-BUTENE	3	0.9	0.13	0	0.0	0.00	0	0.0	0.00	0.2	0.12	1.43
BENZENE	119	33.3	4.64	10	2.7	34.40	3	0.9	8.05	8.5	5.35	2.39
TOLUENE	92	25.7	3.61	0	0.0	0.00	5	1.3	11.83	5.7	3.58	10.81
ISOPENTANE	44	12.5	1.70	0	0.0	0.00	10	2.8	25.62	3.4	2.11	2.95
1-PENTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
PENTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2-METHYL-1-BUTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
TRANS-2-PENTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
CIS-2-PENTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
2,2-DIMETHYLBUTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
CYCLOPENTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
CYCLOPENTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	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	0.00
2,3-DIMETHYLBUTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2,3-DIMETHYL-1-BUTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2-METHYLPENTANE	10	2.9	0.39	0	0.0	0.00	0	0.0	0.00	0.6	0.38	0.55
4-METHYL-2-PENTENE	10	2.8	0.39	0	0.0	0.00	0	0.0	0.00	0.6	0.37	3.11
MTBE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
3-METHYLPENTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
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	0.00
HEXANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00

SUMMARY OF HYDROCARBON SPECIATION DATA FOR TEST NO. B2FDC-01S

COMPOUND	BAG 1			BAG 2			BAG 3			FTP TOTAL		FTP OZONE
	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG/MI	WGT. %	MG/MI
C6 OLEFINS	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2,4-DIMETHYLPENTANE	7	2.0	0.28	0	0.0	0.00	0	0.0	0.00	0.4	0.27	0.45
METHYLCYCLOPENTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
CYCLOHEXANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
METHYLCYCLOPENTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
2,3-DIMETHYLPENTANE/2-METHYLHEXANE	25	7.1	0.97	0	0.0	0.00	0	0.0	0.00	1.5	0.92	1.25
CYCLOHEXENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
3-METHYLHEXANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2,2,4-TRIMETHYLPENTANE	87	24.4	3.32	0	0.0	0.00	0	0.0	0.00	5.1	3.17	3.64
N-HEPTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	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	0.00
METHYLCYCLOHEXANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	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	0.00
2,3,4-TRIMETHYLPENTANE	15	4.1	0.56	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2,3,3-TRIMETHYLPENTANE	11	3.1	0.43	0	0.0	0.00	0	0.0	0.00	0.8	0.53	0.61
2-METHYL-3-HEPTENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.6	0.41	0.47
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	0.00
2-/4-METHYLHEPTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
3-METHYLHEPTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	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	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	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	0.00
OCTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
2,4-DIMETHYLHEPTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
ETHYLBENZENE	10	2.9	0.40	0	0.0	0.00	0	0.0	0.00	0.6	0.38	1.08
2,3-DIMETHYLHEPTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
P-XYLENE/M-XYLENE	64	17.9	2.45	0	0.0	0.00	0	0.0	0.00	3.7	2.34	20.85
2-METHYLOCTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
4-METHYLOCTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
3-METHYLOCTANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00

SUMMARY OF HYDROCARBON SPECIATION DATA FOR TEST NO. B2FDC-01S

COMPOUND	BAG 1			BAG 2			BAG 3			FTP TOTAL		FTP OZONE
	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG	MG/MI	WGT. %	MG/MI	WGT. %	MG/MI
O-XYLENE	20	6.7	0.78	0	0.0	0.00	0	0.0	0.00	1.2	0.74	6.13
NONANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
TRANS-2-NONENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
PROPYLBENZENE	12	3.4	0.46	0	0.0	0.00	0	0.0	0.00	0.7	0.44	1.03
2,3-DIMETHYLOCTANE	8	2.3	0.31	0	0.0	0.00	0	0.0	0.00	0.5	0.30	0.28
O-ETHYLTOLUENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
1,2,4-TRIMETHYLBENZENE	17	4.8	0.66	0	0.0	0.00	0	0.0	0.00	1.0	0.63	7.40
ISOBUTYLBENZENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
DECANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
P-CYMENE	6	1.7	0.23	0	0.0	0.00	0	0.0	0.00	0.4	0.22	1.68
INDAN(E)	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	0.00
M-DIETHYLBENZENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	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	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	0.00
O-DIETHYLBENZENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
2-METHYLDECANE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
BICYCLOPENTYL	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
UNDECANE	9	2.6	0.35	0	0.0	0.00	0	0.0	0.00	0.5	0.34	4.01
1,3,5-TRIMETHYLBENZENE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
C7 OLEFINS	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
C8-C9 OLEFINS	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
C9-C11 PARAFFINS, OLEFINS, AROMATICS	10	2.9	0.39	2	0.5	5.91	2	0.5	4.27	1.0	0.60	5.94
FORMALDEHYDE	1	0.3	0.04	0	0.0	0.31	0	0.0	0.00	0.1	0.05	0.28
ACETALDEHYDE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
ACROLEIN	3	0.7	0.10	0	0.1	1.05	0	0.0	0.00	0.2	0.12	0.07
ACETONE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
PROPIONALDEHYDE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
CROTONALDEHYDE	0	0.0	0.01	0	0.0	0.00	0	0.0	0.00	0.0	0.01	0.04
ISOBUTYRALDEHYDE	0	0.0	0.01	0	0.0	0.00	0	0.0	0.00	0.0	0.01	0.01
METHYL ETHYL KETONE	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0.0	0.00	0.00
BENZALDEHYDE												
HEXANALDEHYDE												

APPENDIX L

COMPUTER PRINTOUTS FOR VW JETTA FTP AND HFET EMISSION TEST PRIOR TO EHC CONTROLLER FAILURE

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

TEST NO. B1VHC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 5/27/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29707. KM(18459. MILES)

BAROMETER 739.14 MM HG(29.10 IN HG)
RELATIVE HUMIDITY 62. PCT
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 11.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.03

BAG RESULTS

BAG NUMBER / DESCRIPTION	1 COLD TRANSIENT	2 STABILIZED	3 HOT TRANSIENT	4 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)	40.0 (104.0)	39.4 (103.0)	41.1 (106.0)	40.6 (105.0)
BLOWER REVOLUTIONS	40108.	68638.	40012.	68577.
TOT FLOW STD. CU. METRES(SCF)	72.5 (2559.)	124.2 (4386.)	72.0 (2543.)	123.6 (4365.)
THC SAMPLE METER/RANGE/PPM	36.9/ 2/ 37.	14.5/ 2/ 14.	18.9/ 2/ 19.	14.1/ 2/ 14.
THC BCKGRD METER/RANGE/PPM	8.5/ 2/ 8.	10.2/ 2/ 10.	10.4/ 2/ 10.	10.9/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	97.1/ 13/ 240.	20.2/ 12/ 20.	39.2/ 12/ 39.	19.6/ 12/ 20.
CO BCKGRD METER/RANGE/PPM	.4/ 13/ 1.	.5/ 12/ 1.	.5/ 12/ 1.	.1/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	57.2/ 1/1.0598	81.3/ 14/ .6828	94.4/ 14/ .9809	80.4/ 14/ .6661
CO2 BCKGRD METER/RANGE/PCT	2.9/ 1/ .0508	14.6/ 14/ .0502	14.5/ 14/ .0498	14.4/ 14/ .0494
NOX SAMPLE METER/RANGE/PPM	3.0/ 1/ .8	1.5/ 1/ .4	3.2/ 1/ .8	1.5/ 1/ .4
NOX BCKGRD METER/RANGE/PPM	1.3/ 1/ .3	1.4/ 1/ .4	1.4/ 1/ .4	1.4/ 1/ .4
DILUTION FACTOR	12.33	19.53	13.58	20.02
THC CONCENTRATION PPM	29.	5.	9.	4.
CO CONCENTRATION PPM	230.	19.	37.	19.
CO2 CONCENTRATION PCT	1.0131	.6351	.9347	.6192
NOX CONCENTRATION PPM	.5	.0	.5	.0
THC MASS GRAMS	1.21	.35	.38	.27
CO MASS GRAMS	19.39	2.76	3.10	2.71
CO2 MASS GRAMS	1344.1	1444.4	1232.2	1401.5
NOX MASS GRAMS	.07	.01	.07	.01
THC GRAMS/MI	.34	.09	.11	.07
CO GRAMS/MI	5.36	.70	.86	.69
CO2 GRAMS/MI	371.5	369.5	339.9	357.9
NOX GRAMS/MI	.02	.00	.02	.00
FUEL ECONOMY IN MPG	23.28	23.91	25.96	24.69
RUN TIME SECONDS	505.	866.	505.	868.
MEASURED DISTANCE MI	3.62	3.91	3.63	3.92
SCF, DRY	.970	.974	.971	.974
DFC, WET (DRY)	23.60	7.53	25.28	7.54
TOT VOL (SCM) / SAM BLR (SCM)	.972	.938(.919)	.973	.941(.922)
	196.7/ .00		195.6/ .00	

COMPOSITE RESULTS

TEST NUMBER		B1VHC-01
BAROMETER	MM HG	739.1
HUMIDITY	G/KG	11.5
TEMPERATURE	DEG C	23.3

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	361.8	(358.4)
FUEL ECONOMY	MPG	24.30	(24.53)
HYDROCARBONS (THC)	G/MI	.14	(.14)
CARBON MONOXIDE	G/MI	1.71	(1.70)
OXIDES OF NITROGEN	G/MI	.01	(.01)

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

ST NO. B2VHC01A RUN
HICLE MODEL 89 VW JETTA
GINE 1.8 L(110. CID) L-4
ANSMISSION A3

ROMETER 741.93 MM HG(29.21 IN HG)
LATIVE HUMIDITY 58. PCT
G RESULTS

VEHICLE NO.M100
DATE 8/ 5/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 10.2 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30096. KM(18701. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .98

BAG NUMBER	1	2	3
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT
BLOWER DIF P MM. H2O(IN. H2O)	1041.4 (41.0)	1041.4 (41.0)	1041.4 (41.0)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)	1117.6 (44.0)	1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	45.0 (113.0)	41.7 (107.0)	44.4 (112.0)
BLOWER REVOLUTIONS	40138.	68775.	40044.
TOT FLOW STD. CU. METRES(SCF)	71.0 (2506.)	122.1 (4311.)	70.7 (2498.)
THC SAMPLE METER/RANGE/PPM	11.1/ 2/ 11.	9.7/ 2/ 10.	10.8/ 2/ 11.
THC BCKGRD METER/RANGE/PPM	7.2/ 2/ 7.	7.3/ 2/ 7.	7.7/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	31.2/ 12/ 31.	31.3/ 12/ 31.	34.7/ 12/ 35.
CO BCKGRD METER/RANGE/PPM	1.5/ 12/ 2.	1.3/ 12/ 1.	.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	55.9/ 1/1.0359	80.0/ 14/ .6589	92.3/ 14/ .9245
CO2 BCKGRD METER/RANGE/PCT	3.0/ 1/ .0526	15.3/ 14/ .0531	15.4/ 14/ .0535
NOX SAMPLE METER/RANGE/PPM	13.2/ 1/ 3.4	1.4/ 1/ .4	2.8/ 1/ .7
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	1.2/ 1/ .3	1.2/ 1/ .3
DILUTION FACTOR	11.45	17.97	12.82
THC CONCENTRATION PPM	5.	3.	4.
CO CONCENTRATION PPM	28.	29.	32.
CO2 CONCENTRATION PCT	.9879	.6087	.8751
NOX CONCENTRATION PPM	3.1	.1	.4
THC MASS GRAMS	.37	.39	.30
CO MASS GRAMS	2.33	4.09	2.65
CO2 MASS GRAMS	1283.8	1360.7	1133.4
NOX MASS GRAMS	.42	.02	.06
THC GRAMS/MI	.10	.10	.08
CO GRAMS/MI	.65	1.06	.74
CO2 GRAMS/MI	359.0	351.6	315.2
NOX GRAMS/MI	.12	.00	.02
FUEL ECONOMY IN MPG	13.20	13.45	15.02
RUN TIME SECONDS	505.	868.	505.
MEASURED DISTANCE MI	3.58	3.87	3.60
SCF, DRY	.963	.970	.965

POSITE RESULTS

TEST NUMBER		B2VHC01A
BAROMETER	MM HG	741.9
HUMIDITY	G/KG	10.2
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	343.1	(.0)
FUEL ECONOMY	MPG	13.79	(.00)
HYDROCARBONS (THC)	G/MI	.10	(.00)
CARBON MONOXIDE	G/MI	.89	(.00)
OXIDES OF NITROGEN	G/MI	.03	(.00)

APPENDIX N

COMPUTER PRINTOUTS OF TASK 2 EMISSION TEST RESULTS FOR VW JETTA

Page N.	Test No.	Fuel	Catalyst	Test Cycle
2	B2VBL-01	M85	OEM	FTP
3	B2VBL-01	M85	OEM	HFET
4	B2VBL-01	M85	OEM	NYCC
5	B2VJM-01	M85	JM	FTP
6	B2VJM-01	M85	JM	HFET
7	B2VJM-01	M85	JM	NYCC
8	B2VJM-02	M85	JM	FTP
9	B2VJM-02	M85	JM	HFET
10	B2VJM-02	M85	JM	NYCC
11	B2VDC-01	M85	Degussa	FTP
12	B2VDC-01	M85	Degussa	HFET
13	B2VDC-01	M85	Degussa	NYCC
14	B2VDC-02	M85	Degussa	FTP
15	B2VDC-02	M85	Degussa	HFET
16	B2VDC-02	M85	Degussa	NYCC
17	B2VHC-01A	M85	Camet	FTP
18	B2VHC-01A	M85	Camet	HFET
19	B2VHC-01A	M85	Camet	NYCC
20	B2VHC-02A	M85	Camet	FTP
21	B2VHC-02A	M85	Camet	HFET
22	B2VHC-02A	M85	Camet	NYCC
23	B1VBL-01	Howell EEE	OEM	FTP
24	B1VBL-01	Howell EEE	OEM	HFET
25	B1VBL-01	Howell EEE	OEM	NYCC
26	B1VJM-01	Howell EEE	JM	FTP
27	B1VJM-01	Howell EEE	JM	HFET
28	B1VJM-01	Howell EEE	JM	NYCC
29	B1VJM-02	Howell EEE	JM	FTP
30	B1VJM-02	Howell EEE	JM	HFET
31	B1VJM-02	Howell EEE	JM	NYCC
32	B1VDC-01	Howell EEE	Degussa	FTP
33	B1VDC-01	Howell EEE	Degussa	HFET
34	B1VDC-01	Howell EEE	Degussa	NYCC
35	B1VDC-02	Howell EEE	Degussa	FTP
36	B1VDC-02	Howell EEE	Degussa	HFET
37	B1VDC-02	Howell EEE	Degussa	NYCC
38	B1VHC-01A	Howell EEE	Camet	FTP
39	B1VHC-01A	Howell EEE	Camet	HFET
40	B1VHC-01A	Howell EEE	Camet	NYCC
41	B1VHC-02A	Howell EEE	Camet	FTP
42	B1VHC-02A	Howell EEE	Camet	HFET
43	B1VHC-02A	Howell EEE	Camet	NYCC
44	J2HC/OEM-1	M85	Camet + OEM	FTP
45	J2HC/OEM-2	M85	Camet + OEM	FTP
46	J2HC/DC-1	M85	Camet + Degussa	FTP
47	J2HC/DC-2	M85	Camet + Degussa	FTP

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TEST NO. B2VBL-01 RUN 1
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 12/20/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29416. KM(18276. MILES)

BAROMETER 737.87 MM HG(29.05 IN HG)
RELATIVE HUMIDITY 49. PCT

DRY BULB TEMP. 24.4 DEG C(75.0 DEG F)
ABS. HUMIDITY 9.6 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)	787.4 (31.0)	789.9 (31.1)	805.2 (31.7)	789.9 (31.1)
BLOWER INLET P MM. H2O(IN. H2O)	779.8 (30.7)	784.9 (30.9)	787.4 (31.0)	784.9 (30.9)
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	40521.	69436.	40416.	69377.
TOT FLOW STD. CU. METRES(SCF)	74.9 (2644.)	128.5 (4537.)	74.6 (2636.)	128.5 (4537.)
THC SAMPLE METER/RANGE/PPM	56.4/ 2/ 56.	15.7/ 2/ 16.	19.0/ 2/ 19.	15.6/ 2/ 16.
THC BCKGRD METER/RANGE/PPM	13.6/ 2/ 14.	13.5/ 2/ 13.	13.0/ 2/ 13.	12.9/ 2/ 13.
CO SAMPLE METER/RANGE/PPM	81.4/ 14/ 395.	22.8/ 12/ 23.	57.8/ 12/ 58.	24.6/ 12/ 25.
CO BCKGRD METER/RANGE/PPM	.1/ 14/ 0.	1.2/ 12/ 1.	1.1/ 12/ 1.	1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	93.5/ 14/ .9562	77.0/ 14/ .6068	69.5/ 14/ .6551	76.0/ 14/ .5903
CO2 BCKGRD METER/RANGE/PCT	14.2/ 14/ .0486	14.1/ 14/ .0482	14.1/ 14/ .0482	14.0/ 14/ .0478
NOX SAMPLE METER/RANGE/PPM	19.0/ 1/ 4.9	1.0/ 1/ .3	3.0/ 1/ .8	1.1/ 1/ .3
NOX BCKGRD METER/RANGE/PPM	.9/ 1/ .2	.9/ 1/ .2	.8/ 1/ .2	.9/ 1/ .2
DILUTION FACTOR	12.04	19.71	13.95	20.25
THC CONCENTRATION PPM	44.	3.	7.	3.
CO CONCENTRATION PPM	378.	21.	54.	23.
CO2 CONCENTRATION PCT	.9116	.5611	.8104	.5449
NOX CONCENTRATION PPM	4.6	.2	.6	.1
THC MASS GRAMS	3.66	.41	.58	.46
CO MASS GRAMS	32.97	3.13	4.72	3.44
CO2 MASS GRAMS	1249.8	1319.8	1107.5	1281.9
NOX MASS GRAMS	.64	.01	.08	.02
THC GRAMS/MI	1.00	.11	.16	.12
CO GRAMS/MI	9.04	.80	1.30	.86
CO2 GRAMS/MI	342.8	338.2	305.8	327.8
NOX GRAMS/MI	.18	.00	.02	.00
FUEL ECONOMY IN MPG	13.75 14.14	14.52	16.01 15.45	14.97
RUN TIME SECONDS	505.	867.	505.	868.
MEASURED DISTANCE MI	3.65 7.55	3.90	3.62 7.53	3.91
SCF, DRY	.968 .972	.974	.970 .973	.974
DFC, WET (DRY)	.937(.923)		.942(.928)	
TOT VOL (SCM) / SAM BLR (SCM)	203.4/ .00		203.1/ .00	

COMPOSITE RESULTS

TEST NUMBER		B2VBL-01	
BAROMETER	MM HG	737.9	
HUMIDITY	G/KG	9.6	
TEMPERATURE	DEG C	24.4	

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	330.3	(327.2)
FUEL ECONOMY	MPG	14.72	(14.86)
HYDROCARBONS (THC)	G/MI	.31	(.31)
CARBON MONOXIDE	G/MI	2.65	(2.67)
OXIDES OF NITROGEN	G/MI	.04	(.04)

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

TEST NO. 92VBL-01 RUN 1
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 737.11 MM HG(29.02 IN HG)
RELATIVE HUMIDITY 49. PCT

VEHICLE NO.M100
DATE 12/20/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 9.6 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29440. KM(18293. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR .96

BAG RESULTS

TEST CYCLE		HFET
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		61225.
TOT FLOW STD. CU. METRES(SCF)		113.0 (3990.)
THC SAMPLE METER/RANGE/PPM		21.8/ 2/ 22.
THC BCKGRD METER/RANGE/PPM		12.8/ 2/ 13.
CO SAMPLE METER/RANGE/PPM		51.5/ 13/ 121.
CO BCKGRD METER/RANGE/PPM		.5/ 13/ 1.
CO2 SAMPLE METER/RANGE/PCT		65.9/ 1/1.2123
CO2 BCKGRD METER/RANGE/PCT		2.6/ 1/ .0459
NOX SAMPLE METER/RANGE/PPM		5.2/ 1/ 1.4
NOX BCKGRD METER/RANGE/PPM		1.1/ 1/ .3
DILUTION FACTOR		9.82
THC CONCENTRATION PPM		10.
CO CONCENTRATION PPM		114.
CO2 CONCENTRATION PCT		1.1711
NOX CONCENTRATION PPM		1.1
THC MASS GRAMS		1.29
CO MASS GRAMS		14.97
CO2 MASS GRAMS		2422.9
NOX MASS GRAMS		.23
RUN TIME	SECONDS	766.
DFC, WET (DRY)		.898 (.884)
SCF, WET (DRY)		1.000 (.984)
VOL (SCM)		113.0
BAM BLR (SCM)		.00
MI (MEASURED)		10.33
TEST NUMBER.		92VBL-01
BAROMETER.	MM HG	737.1
HUMIDITY.	G/KG	9.6
TEMPERATURE.	DEG C	24.4
CARBON DIOXIDE.	G/MI	234.5
FUEL ECONOMY.	MPG	20.8
HYDROCARBONS. (THC)	G/MI	.13
CARBON MONOXIDE.	G/MI	1.45
OXIDES OF NITROGEN.	G/MI	.02

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

TEST NO. B2VBL-01 RUN 1
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 736.85 MM HG(29.01 IN HG)
RELATIVE HUMIDITY 56. PCT

VEHICLE NO. M100
DATE 12/20/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 11.5 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29457. KM(18304. MILES)
C = .449 H = .127 O = .424
FUEL DENSITY = 6.61
NOX HUMIDITY CORRECTION FACTOR 1.03

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)		41.7 (107.0)
BLOWER REVOLUTIONS		47730.
TOT FLOW STD. CU. METRES(SCF)		88.1 (3110.)
THC SAMPLE METER/RANGE/PPM		13.0/ 2/ 13.
THC BCKGRD METER/RANGE/PPM		11.7/ 2/ 12.
CO SAMPLE METER/RANGE/PPM		5.9/ 12/ 6.
CO BCKGRD METER/RANGE/PPM		1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		68.3/ 14/ .4760
CO2 BCKGRD METER/RANGE/PCT		13.6/ 14/ .0462
NOX SAMPLE METER/RANGE/PPM		1.4/ 1/ .4
NOX BCKGRD METER/RANGE/PPM		1.2/ 1/ .3
DILUTION FACTOR		25.18
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		5.
CO2 CONCENTRATION PCT		.4317
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.17
CO MASS GRAMS		.49
CO2 MASS GRAMS		696.1
NOX MASS GRAMS		.01
RUN TIME	SECONDS	597.
DFC, WET (DRY)		.960 (.943)
SCF, WET (DRY)		1.000 (.974)
VOL (SCM)		88.1
SAM BLR (SCM)		.00
MI (MEASURED)		1.18
TEST NUMBER,		B2VBL-01
BAROMETER,	MM HG	736.9
HUMIDITY,	G/KG	11.5
TEMPERATURE,	DEG C	25.0
CARBON DIOXIDE,	G/MI	590.9
FUEL ECONOMY,	MPG	8.3
HYDROCARBONS, (THC)	G/MI	.15
CARBON MONOXIDE,	G/MI	.42
OXIDES OF NITROGEN,	G/MI	.01

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PROJECT 08-3381-001

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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TEST NO. B2VJH-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.63 MM HG(29.08 IN HG)
RELATIVE HUMIDITY 61. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 5/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 10.5 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29512. KM(18338. 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)		43.3 (110.0)
BLOWER REVOLUTIONS		60622.
TOT FLOW STD. CU. METRES(SCF)		108.2 (3821.)
THC SAMPLE METER/RANGE/PPM		13.9/ 2/ 14.
THC BCKGRD METER/RANGE/PPM		15.1/ 2/ 15.
CO SAMPLE METER/RANGE/PPM		53.5/ 12/ 53.
CO BCKGRD METER/RANGE/PPM		3.9/ 12/ 4.
CO2 SAMPLE METER/RANGE/PCT		64.5/ 1/1.1935
CO2 BCKGRD METER/RANGE/PCT		3.0/ 1/ .0526
NOX SAMPLE METER/RANGE/PPM		3.3/ 1/ .9
NOX BCKGRD METER/RANGE/PPM		2.1/ 1/ .6
DILUTION FACTOR		9.93
THC CONCENTRATION PPM		0.
CO CONCENTRATION PPM		47.
CO2 CONCENTRATION PCT		1.1462
NOX CONCENTRATION PPM		.4
THC MASS GRAMS		.04
CO MASS GRAMS		5.92
CO2 MASS GRAMS		2270.7
NOX MASS GRAMS		.08
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.899 (.882)
SCF, WET (DRY)		1.000 (.959)
VOL (SCM)		108.2
SAM BLR (SCM)		.00
MI (MEASURED)		10.15
TEST NUMBER,		B2VJH-01
BAROMETER,	MM HG	738.6
HUMIDITY,	G/KG	10.5
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	223.7
FUEL ECONOMY,	MPG	21.2
HYDROCARBONS, (THC)	G/MI	.00
CARBON MONOXIDE,	G/MI	.58
OXIDES OF NITROGEN,	G/MI	.01

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EST NO. B2VJH-01 RUN
EHICLE MODEL 89 VW JETTA
NGINE 1.8 L(110. CID) L-4
RANSMISSION A3

AROMETER 738.63 MM HG(29.08 IN HG)
ELATIVE HUMIDITY 65. PCT
AG RESULTS

VEHICLE NO.M100
DATE 5/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 10.8 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29530. KM(18349. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.00

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		47502.
TOT FLOW STD. CU. METRES(SCF)		85.1 (3005.)
THC SAMPLE METER/RANGE/PPM		14.2/ 2/ 14.
THC BCKGRD METER/RANGE/PPM		14.6/ 2/ 15.
CO SAMPLE METER/RANGE/PPM		3.3/ 12/ 3.
CO BCKGRD METER/RANGE/PPM		3.4/ 12/ 3.
CO2 SAMPLE METER/RANGE/PCT		67.9/ 14/ .4706
CO2 BCKGRD METER/RANGE/PCT		15.6/ 14/ .0544
NOX SAMPLE METER/RANGE/PPM		7.7/ 1/ 2.0
NOX BCKGRD METER/RANGE/PPM		2.3/ 1/ .6
DILUTION FACTOR		25.22
THC CONCENTRATION PPM		0.
CO CONCENTRATION PPM		0.
CO2 CONCENTRATION PCT		.4184
NOX CONCENTRATION PPM		1.4
THC MASS GRAMS		.02
CO MASS GRAMS		.00
CO2 MASS GRAMS		651.9
NOX MASS GRAMS		.23
RUN TIME	SECONDS	599.
DFC, WET (DRY)		.960 (.940)
SCF, WET (DRY)		1.000 (.971)
VOL (SCM)		85.1
SAM BLR (SCM)		.00
MI (MEASURED)		1.13
TEST NUMBER,		B2VJH-01
BAROMETER,	MM HG	738.6
HUMIDITY,	G/KG	10.8
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	577.4
FUEL ECONOMY,	MPG	8.2
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.00
OXIDES OF NITROGEN,	G/MI	.21

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TEST NO. B2VJH-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 5/10/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29531. KM(18350. MILES)

BAROMETER 738.38 MM HG(29.07 IN HG)
RELATIVE HUMIDITY 60. PCT
DRY BULB TEMP. 25.6 DEG C(78.0 DEG F)
ABS. HUMIDITY 12.8 GM/KG
NOX HUMIDITY CORRECTION FACTOR 1.07

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)	40.6 (105.0)	43.9 (111.0)	43.3 (110.0)
BLOWER REVOLUTIONS	40103.	68815.	39945.	68719.
TOT FLOW STD. CU. METRES(SCF)	71.3 (2518.)	123.9 (4376.)	71.1 (2512.)	122.6 (4329.)
THC SAMPLE METER/RANGE/PPM	34.1/ 2/ 34.	14.6/ 2/ 15.	13.1/ 2/ 13.	12.2/ 2/ 12.
THC BCKGRD METER/RANGE/PPM	17.0/ 2/ 17.	15.2/ 2/ 15.	13.5/ 2/ 13.	12.4/ 2/ 12.
CO SAMPLE METER/RANGE/PPM	87.3/ 13/ 214.	2.9/ 12/ 3.	9.8/ 12/ 10.	1.4/ 12/ 1.
CO BCKGRD METER/RANGE/PPM	.4/ 13/ 1.	1.0/ 12/ 1.	.8/ 12/ 1.	.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	93.3/ 14/ .9508	76.5/ 14/ .5985	87.9/ 14/ .8182	75.4/ 14/ .5806
CO2 BCKGRD METER/RANGE/PCT	12.6/ 14/ .0422	12.3/ 14/ .0411	12.6/ 14/ .0422	12.8/ 14/ .0430
NOX SAMPLE METER/RANGE/PPM	7.8/ 1/ 2.0	3.0/ 1/ .8	3.2/ 1/ .8	4.6/ 1/ 1.2
NOX BCKGRD METER/RANGE/PPM	.7/ 1/ .2	.8/ 1/ .2	.7/ 1/ .2	.8/ 1/ .2
DILUTION FACTOR	12.22	19.84	14.52	20.47
THC CONCENTRATION PPM	18.	0.	1.	0.
CO CONCENTRATION PPM	203.	2.	9.	1.
CO2 CONCENTRATION PCT	.9121	.5595	.7789	.5397
NOX CONCENTRATION PPM	1.9	.6	.7	1.0
THC MASS GRAMS	1.51	.02	.04	.06
CO MASS GRAMS	16.87	.27	.72	.09
CO2 MASS GRAMS	1190.9	1269.5	1014.5	1211.4
NOX MASS GRAMS	.27	.15	.10	.25
THC GRAMS/MI	.42	.01	.01	.01
CO GRAMS/MI	4.69	.07	.20	.02
CO2 GRAMS/MI	331.1	328.2	282.9	314.0
NOX GRAMS/MI	.08	.04	.03	.07
FUEL ECONOMY IN MPG	14.02 14.26	14.48	16.79 15.89	15.14
RUN TIME SECONDS	505.	868.	504.	869.
MEASURED DISTANCE MI	3.60 7.46	3.87	3.59 7.44	3.86
SCF, DRY	.964 .968	.970	.966 .969	.970
DFC, WET (DRY)	.938(.920)		.944(.925)	
TOT VOL (SCM) / SAM BLR (SCM)	195.2/ .00		193.7/ .00	

COMPOSITE RESULTS

TEST NUMBER		B2VJH-02
BAROMETER	MM HG	738.4
HUMIDITY	G/KG	12.8
TEMPERATURE	DEG C	25.6

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	316.4	(312.2)
FUEL ECONOMY	MPG	14.94	(15.14)
HYDROCARBONS (THC)	G/MI	.09	(.10)
CARBON MONOXIDE	G/MI	1.06	(1.05)
OXIDES OF NITROGEN	G/MI	.04	(.05)

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TEST NO. B2VJH-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 63. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 5/10/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 13.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29556. KM(18365. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.08

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)		43.3 (110.0)
BLOWER REVOLUTIONS		60631.
TOT FLOW STD. CU. METRES(SCF)		108.1 (3818.)
THC SAMPLE METER/RANGE/PPM		12.2/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		12.3/ 2/ 12.
CO SAMPLE METER/RANGE/PPM		45.1/ 12/ 45.
CO BCKGRD METER/RANGE/PPM		1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		64.3/ 1/1.1898
CO2 BCKGRD METER/RANGE/PCT		2.6/ 1/ .0455
NOX SAMPLE METER/RANGE/PPM		2.2/ 1/ .6
NOX BCKGRD METER/RANGE/PPM		.9/ 1/ .2
DILUTION FACTOR		9.96
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		42.
CO2 CONCENTRATION PCT		1.1489
NOX CONCENTRATION PPM		.4
THC MASS GRAMS		.14
CO MASS GRAMS		5.23
CO2 MASS GRAMS		2274.3
NOX MASS GRAMS		.08
RUN TIME	SECONDS	767.
DFC, WET (DRY)		.900 (.881)
SCF, WET (DRY)		1.000 (.959)
VOL (SCM)		108.1
SAM BLR (SCM)		.00
MI (MEASURED)		10.19
TEST NUMBER,		B2VJH-02
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	13.0
TEMPERATURE,	DEG C	25.0
CARBON DIOXIDE,	G/MI	223.3
FUEL ECONOMY,	MPG	21.2
HYDROCARBONS, (THC)	G/MI	.01
CARBON MONOXIDE,	G/MI	.51
OXIDES OF NITROGEN,	G/MI	.01

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TEST NO. B2VJM-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 63. PCT

VEHICLE NO.M100
DATE 5/10/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 13.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1179-F
ODOMETER 29573. KM(18376. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.08

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		47396.
TOT FLOW STD. CU. METRES(SCF)		84.5 (2984.)
THC SAMPLE METER/RANGE/PPM		12.2/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		12.2/ 2/ 12.
CO SAMPLE METER/RANGE/PPM		1.0/ 12/ 1.
CO BCKGRD METER/RANGE/PPM		.7/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		67.6/ 14/ .4666
CO2 BCKGRD METER/RANGE/PCT		12.9/ 14/ .0434
NOX SAMPLE METER/RANGE/PPM		4.5/ 1/ 1.2
NOX BCKGRD METER/RANGE/PPM		.7/ 1/ .2
DILUTION FACTOR		25.45
THC CONCENTRATION PPM		0.
CO CONCENTRATION PPM		0.
CO2 CONCENTRATION PCT		.4249
NOX CONCENTRATION PPM		1.0
THC MASS GRAMS		.05
CO MASS GRAMS		.03
CO2 MASS GRAMS		657.5
NOX MASS GRAMS		.18
RUN TIME	SECONDS	599.
DFC, WET (DRY)		.961 (.941)
SCF, WET (DRY)		1.000 (.971)
VOL (SCM)		84.5
SAM BLR (SCM)		.00
MI (MEASURED)		1.15
TEST NUMBER,		B2VJM-02
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	13.0
TEMPERATURE,	DEG C	25.0
CARBON DIOXIDE,	G/MI	569.9
FUEL ECONOMY,	MPG	8.3
HYDROCARBONS, (THC)	G/MI	.04
CARBON MONOXIDE,	G/MI	.03
OXIDES OF NITROGEN,	G/MI	.15

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TEST NO. BZVDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 7/23/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 29945. KM(18607. MILES)

BAROMETER 744.22 MM HG(29.30 IN HG)
RELATIVE HUMIDITY 65. PCT

DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.01

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)
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)	41.7 (107.0)	38.3 (101.0)	42.2 (108.0)	39.4 (103.0)
BLOWER REVOLUTIONS	40117.	68861.	40034.	68667.
TOT FLOW STD. CU. METRES(SCF)	71.5 (2523.)	123.4 (4359.)	71.2 (2515.)	122.8 (4336.)
THC SAMPLE METER/RANGE/PPM	31.2/ 2/ 31.	14.8/ 2/ 15.	16.8/ 2/ 17.	14.4/ 2/ 14.
THC BCKGRD METER/RANGE/PPM	10.7/ 2/ 11.	15.1/ 2/ 15.	10.4/ 2/ 10.	10.6/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	80.5/ 13/ 196.	16.5/ 12/ 17.	31.8/ 12/ 32.	19.8/ 12/ 20.
CO BCKGRD METER/RANGE/PPM	.3/ 13/ 1.	1.0/ 12/ 1.	.9/ 12/ 1.	1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	94.2/ 14/ .9753	78.6/ 14/ .6341	91.3/ 14/ .8990	78.0/ 14/ .6237
CO2 BCKGRD METER/RANGE/PCT	13.8/ 14/ .0470	13.9/ 14/ .0474	14.3/ 14/ .0490	14.3/ 14/ .0490
NOX SAMPLE METER/RANGE/PPM	11.5/ 1/ 3.0	.6/ 1/ .2	.5/ 1/ .1	.4/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.5/ 1/ .1	.6/ 1/ .2	.4/ 1/ .1	.4/ 1/ .1
DILUTION FACTOR	11.95	18.69	13.18	18.99
THC CONCENTRATION PPM	21.	1.	7.	4.
CO CONCENTRATION PPM	186.	15.	29.	18.
CO2 CONCENTRATION PCT	.9323	.5892	.8537	.5773
NOX CONCENTRATION PPM	2.9	.0	.0	.0
THC MASS GRAMS	1.75	.07	.59	.61
CO MASS GRAMS	15.44	2.15	2.44	2.59
CO2 MASS GRAMS	1219.7	1331.7	1113.3	1297.9
NOX MASS GRAMS	.40	.00	.00	.00
THC GRAMS/MI	.49	.02	.16	.16
CO GRAMS/MI	4.31	.55	.68	.66
CO2 GRAMS/MI	340.8	343.5	309.9	331.7
NOX GRAMS/MI	.11	.00	.00	.00
FUEL ECONOMY IN MPG	13.65	13.73 13.81	15.28	14.74 14.28
RUN TIME SECONDS	505.	868.	505.	868.
MEASURED DISTANCE MI	3.58	7.46 3.88	3.59	7.51 3.91
SCF, DRY	.962	.966 .968	.963	.966 .968
DFC, WET (DRY)		.935(.916)		.939(.919)
TOT VOL (SCM) / SAM BLR (SCM)		194.9/ .00		194.0/ .00

COMPOSITE RESULTS

TEST NUMBER		BZVDC-01
BAROMETER	MM HG	744.2
HUMIDITY	G/KG	11.1
TEMPERATURE	DEG C	22.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	333.7	(330.3)
FUEL ECONOMY	MPG	14.15	(14.29)
HYDROCARBONS (THC)	G/MI	.16	(.20)
CARBON MONOXIDE	G/MI	1.36	(1.40)
OXIDES OF NITROGEN	G/MI	.02	(.02)

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TEST NO. B2VDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 744.47 MM HG(29.31 IN HG)
RELATIVE HUMIDITY 57. PCT

VEHICLE NO.M100
DATE 7/23/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 9.8 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 29969. KM(18622. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .97

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.9 (111.0)
BLOWER REVOLUTIONS		60595.
TOT FLOW STD. CU. METRES(SCF)		107.5 (3797.)
THC SAMPLE METER/RANGE/PPM		18.8/ 2/ 19.
THC BCKGRD METER/RANGE/PPM		9.9/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		46.4/ 12/ 46.
CO BCKGRD METER/RANGE/PPM		1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		68.0/ 1/1.2576
CO2 BCKGRD METER/RANGE/PCT		2.7/ 1/ .0473
NOX SAMPLE METER/RANGE/PPM		2.8/ 1/ .7
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		9.42
THC CONCENTRATION PPM		10.
CO CONCENTRATION PPM		43.
CO2 CONCENTRATION PCT		1.2153
NOX CONCENTRATION PPM		.6
THC MASS GRAMS		1.23
CO MASS GRAMS		5.36
CO2 MASS GRAMS		2392.4
NOX MASS GRAMS		.12
RUN TIME	SECONDS	766.
DFC, WET (DRY)		.894 (.877)
SCF, WET (DRY)		1.000 (.960)
VOL (SCM)		107.5
SAM BLR (SCM)		.00
MI (MEASURED)		10.20
TEST NUMBER,		B2VDC-01
BAROMETER,	MM HG	744.5
HUMIDITY,	G/KG	9.8
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	234.6
FUEL ECONOMY,	MPG	20.2
HYDROCARBONS, (THC)	G/MI	.12
CARBON MONOXIDE,	G/MI	.53
OXIDES OF NITROGEN,	G/MI	.01

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. BZVDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 744.47 MM HG(29.31 IN HG)
RELATIVE HUMIDITY 60. PCT

VEHICLE NO.M100
DATE 7/23/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 29987. KM(18633. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

		NYCC
TEST CYCLE		
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47575.
TOT FLOW STD. CU. METRES(SCF)		84.5 (2984.)
THC SAMPLE METER/RANGE/PPM		9.8/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		9.6/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		4.8/ 12/ 5.
CO BCKGRD METER/RANGE/PPM		.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		70.6/ 14/ .5080
CO2 BCKGRD METER/RANGE/PCT		14.4/ 14/ .0494
NOX SAMPLE METER/RANGE/PPM		1.3/ 1/ .3
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		23.38
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		4.
CO2 CONCENTRATION PCT		.4607
NOX CONCENTRATION PPM		.2
THC MASS GRAMS		.06
CO MASS GRAMS		.38
CO2 MASS GRAMS		712.7
NOX MASS GRAMS		.03
RUN TIME	SECONDS	601.
DFC, WET (DRY)		.957 (.939)
SCF, WET (DRY)		1.000 (.972)
VOL (SCM)		84.5
SAM BLR (SCM)		.00
MI (MEASURED)		1.16
TEST NUMBER,		BZVDC-01
BAROMETER,	MM HG	744.5
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	615.7
FUEL ECONOMY,	MPG	7.7
HYDROCARBONS, (THC)	G/MI	.05
CARBON MONOXIDE,	G/MI	.33
OXIDES OF NITROGEN,	G/MI	.03

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PROJECT 08-3734-001

TEST NO. B2VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 7/24/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30000. KM(18641. MILES)

BAROMETER 742.19 MM HG(29.22 IN HG)
RELATIVE HUMIDITY 65. PCT
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.02

BAG RESULTS

BAG NUMBER / DESCRIPTION	1 COLD TRANSIENT	2 STABILIZED	3 HOT TRANSIENT	4 STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)	1041.4 (41.0)	1054.1 (41.5)	1054.1 (41.5)
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)	41.1 (106.0)	36.7 (98.0)	41.7 (107.0)	39.4 (103.0)
BLOWER REVOLUTIONS	40210.	68977.	40061.	68827.
TOT FLOW STD. CU. METRES(SCF)	71.5 (2524.)	123.7 (4370.)	71.1 (2512.)	122.7 (4333.)
THC SAMPLE METER/RANGE/PPM	33.5/ 2/ 33.	15.1/ 2/ 15.	17.4/ 2/ 17.	14.1/ 2/ 14.
THC BCKGRD METER/RANGE/PPM	11.1/ 2/ 11.	12.0/ 2/ 12.	10.7/ 2/ 11.	10.7/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	72.9/ 13/ 175.	19.6/ 12/ 20.	36.2/ 12/ 36.	17.8/ 12/ 18.
CO BCKGRD METER/RANGE/PPM	.1/ 13/ 0.	.5/ 12/ 1.	.5/ 12/ 1.	.7/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	94.3/ 14/ .9781	78.3/ 14/ .6289	91.2/ 14/ .8965	78.3/ 14/ .6289
CO2 BCKGRD METER/RANGE/PCT	13.8/ 14/ .0470	13.9/ 14/ .0474	14.1/ 14/ .0482	14.2/ 14/ .0486
NOX SAMPLE METER/RANGE/PPM	11.2/ 1/ 2.9	.8/ 1/ .2	1.4/ 1/ .4	.6/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	.6/ 1/ .2	.8/ 1/ .2	.6/ 1/ .2	.6/ 1/ .2
DILUTION FACTOR	11.93	18.84	13.21	18.85
THC CONCENTRATION PPM	23.	4.	8.	4.
CO CONCENTRATION PPM	167.	18.	34.	16.
CO2 CONCENTRATION PCT	.9350	.5840	.8520	.5829
NOX CONCENTRATION PPM	2.8	.0	.2	.0
THC MASS GRAMS	1.91	.53	.61	.56
CO MASS GRAMS	13.88	2.65	2.81	2.35
CO2 MASS GRAMS	1223.7	1323.1	1109.5	1309.5
NOX MASS GRAMS	.38	.00	.03	.00
THC GRAMS/MI	.54	.14	.17	.14
CO GRAMS/MI	3.90	.69	.79	.61
CO2 GRAMS/MI	343.7	343.3	311.1	338.6
NOX GRAMS/MI	.11	.00	.01	.00
FUEL ECONOMY IN MPG	13.56 13.68	13.80	15.21 14.55	13.99
RUN TIME SECONDS	505.	868.	505.	868.
MEASURED DISTANCE MI	3.56 7.41	3.85	3.57 7.43	3.87
SCF, DRY	.962 .966	.968	.963 .966	.968
DFC, WET (DRY)	.936(.916)		.939(.919)	
TOT VOL (SCM) / SAM BLR (SCM)	195.2/ .00		193.8/ .00	

COMPOSITE RESULTS

TEST NUMBER		B2VDC-02
BAROMETER	MM HG	742.2
HUMIDITY	G/KG	11.2
TEMPERATURE	DEG C	22.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	334.5	(333.2)
FUEL ECONOMY	MPG	14.11	(14.17)
HYDROCARBONS (THC)	G/MI	.23	(.23)
CARBON MONOXIDE	G/MI	1.38	(1.35)
OXIDES OF NITROGEN	G/MI	.02	(.02)

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TEST NO. B2VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 742.19 MM HG(29.22 IN HG)
RELATIVE HUMIDITY 54. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 7/24/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 9.6 GH/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30024. KM(18656. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .96

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)		1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		60901.
TOT FLOW STD. CU. METRES(SCF)		107.6 (3799.)
THC SAMPLE METER/RANGE/PPM		18.6/ 2/ 19.
THC BCKGRD METER/RANGE/PPM		10.4/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		43.3/ 12/ 43.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		67.5/ 1/1.2484
CO2 BCKGRD METER/RANGE/PCT		2.6/ 1/ .0455
NOX SAMPLE METER/RANGE/PPM		3.0/ 1/ .8
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		9.50
THC CONCENTRATION PPM		9.
CO CONCENTRATION PPM		40.
CO2 CONCENTRATION PCT		1.2077
NOX CONCENTRATION PPM		.7
THC MASS GRAMS		1.15
CO MASS GRAMS		5.06
CO2 MASS GRAMS		2379.0
NOX MASS GRAMS		.13
RUN TIME	SECONDS	769.
DPC, WET (DRY)		.895 (.879)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		107.6
SAM BLR (SCM)		.00
MI (MEASURED)		10.16
TEST NUMBER,		B2VDC-02
BAROMETER,	MM HG	742.2
HUMIDITY,	G/KG	9.6
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	234.2
FUEL ECONOMY,	MPG	20.2
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	.50
OXIDES OF NITROGEN,	G/MI	.01

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TEST NO. B2VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 742.19 MM HG(29.22 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 7/24/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 9.6 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30040. KM(18666. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .96

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47181.
TOT FLOW STD. CU. METRES(SCF)		83.5 (2948.)
THC SAMPLE METER/RANGE/PPM		9.7/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		9.7/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		4.2/ 12/ 4.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		70.9/ 14/ .5123
CO2 BCKGRD METER/RANGE/PCT		13.7/ 14/ .0466
NOX SAMPLE METER/RANGE/PPM		1.2/ 1/ .3
NOX BCKGRD METER/RANGE/PPM		.8/ 1/ .2
DILUTION FACTOR		23.19
THC CONCENTRATION PPM		0.
CO CONCENTRATION PPM		4.
CO2 CONCENTRATION PCT		.4677
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.04
CO MASS GRAMS		.35
CO2 MASS GRAMS		715.0
NOX MASS GRAMS		.02
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.957 (.940)
SCF, WET (DRY)		1.000 (.974)
VOL (SCM)		83.5
SAM BLR (SCM)		.00
MI (MEASURED)		1.17
TEST NUMBER,		B2VDC-02
BAROMETER,	MM HG	742.2
HUMIDITY,	G/KG	9.6
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	610.9
FUEL ECONOMY,	MPG	7.8
HYDROCARBONS, (THC)	G/MI	.03
CARBON MONOXIDE,	G/MI	.30
OXIDES OF NITROGEN,	G/MI	.02

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EST NO. B2VHC-01A RUN
EHICLE MODEL 89 VW JETTA
NGINE 1.8 L(110. CID) L-4
RANSMISSION A3

VEHICLE NO.M100
DATE 9/30/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30148. KM(18733. MILES)

AROMETER 746.00 MM HG(29.37 IN HG)
ELATIVE HUMIDITY 54. PCT

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 9.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR .96

AG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)
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)	42.8 (109.0)	40.0 (104.0)	42.8 (109.0)	41.1 (106.0)
BLOWER REVOLUTIONS	40083.	68708.	39951.	68508.
TOT FLOW STD. CU. METRES(SCF)	71.4 (2523.)	123.1 (4346.)	71.2 (2514.)	122.5 (4324.)
THC SAMPLE METER/RANGE/PPM	12.6/ 2/ 13.	12.3/ 2/ 12.	13.7/ 2/ 14.	11.6/ 2/ 12.
THC BCKGRD METER/RANGE/PPM	10.0/ 2/ 10.	11.1/ 2/ 11.	10.9/ 2/ 11.	9.9/ 2/ 10.
CO SAMPLE METER/RANGE/PPM	23.5/ 12/ 23.	26.4/ 12/ 26.	46.4/ 12/ 46.	29.4/ 12/ 29.
CO BCKGRD METER/RANGE/PPM	.8/ 12/ 1.	.7/ 12/ 1.	1.2/ 12/ 1.	.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	55.2/ 1/1.0230	79.3/ 14/ .6464	92.0/ 14/ .9168	78.6/ 14/ .6341
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	13.3/ 14/ .0450	13.6/ 14/ .0462	13.2/ 14/ .0446
NOX SAMPLE METER/RANGE/PPM	19.2/ 1/ 4.9	.4/ 1/ .1	3.7/ 1/ 1.0	.3/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.5/ 1/ .1	.3/ 1/ .1	.4/ 1/ .1	.0/ 1/ .0
DILUTION FACTOR	11.60	18.32	12.91	18.67
THC CONCENTRATION PPM	3.	2.	4.	2.
CO CONCENTRATION PPM	22.	25.	43.	28.
CO2 CONCENTRATION PCT	.9831	.6038	.8742	.5919
NOX CONCENTRATION PPM	4.8	.0	.9	.1
THC MASS GRAMS	.28	.25	.30	.31
CO MASS GRAMS	1.80	3.54	3.57	3.98
CO2 MASS GRAMS	1285.9	1360.7	1139.5	1326.9
NOX MASS GRAMS	.63	.01	.11	.02
THC GRAMS/MI	.08	.07	.08	.08
CO GRAMS/MI	.50	.91	1.00	1.02
CO2 GRAMS/MI	358.9	349.8	318.6	341.7
NOX GRAMS/MI	.18	.00	.03	.00
FUEL ECONOMY IN MPG	13.22 13.38	13.53	14.84 14.30	13.84
RUN TIME SECONDS	505.	868.	505.	867.
MEASURED DISTANCE MI	3.58 7.47	3.89	3.58 7.46	3.88
SCF, DRY	.965 .969	.971	.967 .970	.972
DFC, WET (DRY)	.934(.918)		.938(.921)	
-- TOT VOL (SCM) / SAM BLR (SCM)	194.5/ .00		193.6/ .00	

MPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER	B2VHC-01A	CARBON DIOXIDE	G/MI	343.2 (340.8)
BAROMETER	MM HG 746.0	FUEL ECONOMY	MPG	13.80 (13.89)
HUMIDITY	G/KG 9.5	HYDROCARBONS (THC)	G/MI	.07 (.08)
TEMPERATURE	DEG C 22.8	CARBON MONOXIDE	G/MI	.85 (.88)
		OXIDES OF NITROGEN	G/MI	.05 (.05)

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B2VHC-01A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 744.98 MM HG(29.33 IN HG)
RELATIVE HUMIDITY 51. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 9/30/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 9.3 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30172. KM(18748. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .95

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		44.4 (112.0)
BLOWER REVOLUTIONS		60333.
TOT FLOW STD. CU. METRES(SCF)		107.0 (3779.)
THC SAMPLE METER/RANGE/PPM		14.5/ 2/ 14.
THC BCKGRD METER/RANGE/PPM		9.7/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		87.1/ 12/ 87.
CO BCKGRD METER/RANGE/PPM		1.3/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		70.6/ 1/1.3052
CO2 BCKGRD METER/RANGE/PCT		2.4/ 1/ .0420
NOX SAMPLE METER/RANGE/PPM		4.1/ 1/ 1.1
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		9.06
THC CONCENTRATION PPM		6.
CO CONCENTRATION PPM		82.
CO2 CONCENTRATION PCT		1.2679
NOX CONCENTRATION PPM		1.0
THC MASS GRAMS		.72
CO MASS GRAMS		10.16
CO2 MASS GRAMS		2484.2
NOX MASS GRAMS		.20
RUN TIME	SECONDS	764.
DFC, WET (DRY)		.890 (.875)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		107.0
SAM BLR (SCM)		.00
MI (MEASURED)		10.21
TEST NUMBER,		B2VHC-01A
BAROMETER,	MM HG	745.0
HUMIDITY,	G/KG	9.3
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	243.3
FUEL ECONOMY,	MPG	19.4
HYDROCARBONS, (THC)	G/MI	.07
CARBON MONOXIDE,	G/MI	.99
OXIDES OF NITROGEN,	G/MI	.02

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B2VHC-02A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 10/ 1/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30195. KM(18762. MILES)

BAROMETER 743.20 MM HG(29.26 IN HG)
RELATIVE HUMIDITY 54. PCT

DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.0 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)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)	1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)	1117.6 (44.0)	1117.6 (44.0)	1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.3 (110.0)	40.0 (104.0)	42.8 (109.0)	40.6 (105.0)
BLOWER REVOLUTIONS	40049.	68704.	39916.	68447.
TOT FLOW STD. CU. METRES(SCF)	71.0 (2507.)	122.5 (4327.)	70.8 (2501.)	121.7 (4297.)
THC SAMPLE METER/RANGE/PPM	13.1/ 2/ 13.	11.7/ 2/ 12.	12.2/ 2/ 12.	10.8/ 2/ 11.
THC BCKGRD METER/RANGE/PPM	10.8/ 2/ 11.	10.8/ 2/ 11.	11.1/ 2/ 11.	10.8/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	22.0/ 12/ 22.	25.9/ 12/ 26.	23.2/ 12/ 23.	12.2/ 12/ 12.
CO BCKGRD METER/RANGE/PPM	1.4/ 12/ 1.	1.2/ 12/ 1.	1.3/ 12/ 1.	1.4/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	54.6/ 1/1.0120	78.9/ 14/ .6393	91.8/ 14/ .9116	78.7/ 14/ .6358
CO2 BCKGRD METER/RANGE/PCT	2.9/ 1/ .0508	14.4/ 14/ .0494	14.5/ 14/ .0498	14.6/ 14/ .0502
NOX SAMPLE METER/RANGE/PPM	18.7/ 1/ 4.8	.7/ 1/ .2	1.9/ 1/ .5	.7/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	.6/ 1/ .2	.6/ 1/ .2	.7/ 1/ .2	.7/ 1/ .2
DILUTION FACTOR	11.73	18.52	13.02	18.67
THC CONCENTRATION PPM	3.	1.	2.	1.
CO CONCENTRATION PPM	20.	24.	21.	11.
CO2 CONCENTRATION PCT	.9655	.5926	.8657	.5883
NOX CONCENTRATION PPM	4.6	.0	.3	.0
THC MASS GRAMS	.26	.21	.16	.08
CO MASS GRAMS	1.63	3.39	1.73	1.49
CO2 MASS GRAMS	1255.2	1329.5	1122.5	1310.8
NOX MASS GRAMS	.61	.01	.04	.00
THC GRAMS/MI	.07	.05	.04	.02
CO GRAMS/MI	.46	.88	.48	.38
CO2 GRAMS/MI	352.4	345.2	313.2	337.2
NOX GRAMS/MI	.17	.00	.01	.00
FUEL ECONOMY IN MPG	13.46 13.59	13.72	15.14 14.57	14.08
RUN TIME SECONDS	505.	868.	505.	867.
MEASURED DISTANCE MI	3.56 7.41	3.85	3.58 7.47	3.89
SCF, DRY	.965 .969	.971	.966 .970	.971
DFC, WET (DRY)	.935(.918)		.938(.921)	
TOT VOL (SCM) / SAM BLR (SCM)	193.5/ .00		192.5/ .00	

COMPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER		B2VHC-02A		
BAROMETER	MM HG	743.2		
HUMIDITY	G/KG	10.0		
TEMPERATURE	DEG C	23.3		
CARBON DIOXIDE	G/MI		337.9	(335.6)
FUEL ECONOMY	MPG		14.02	(14.13)
HYDROCARBONS (THC)	G/MI		.06	(.05)
CARBON MONOXIDE	G/MI		.68	(.54)
OXIDES OF NITROGEN	G/MI		.04	(.04)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

ST NO. B2VHC-01A RUN
HICLE MODEL 89 VW JETTA
GINE 1.8 L(110. CID) L-4
ANSMISSION A3

ROMETER 744.73 MM HG(29.32 IN HG)
LATIVE HUMIDITY 51. PCT
G RESULTS
TEST CYCLE

VEHICLE NO.M100
DATE 9/30/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 9.3 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1179-F
ODOMETER 30190. KM(18759. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .95

	NYCC
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	44.4 (112.0)
BLOWER REVOLUTIONS	47021.
TOT FLOW STD. CU. METRES(SCF)	83.4 (2944.)
THC SAMPLE METER/RANGE/PPM	8.5/ 2/ 8.
THC BCKGRD METER/RANGE/PPM	8.2/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	6.4/ 12/ 6.
CO BCKGRD METER/RANGE/PPM	.3/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	71.7/ 14/ .5239
CO2 BCKGRD METER/RANGE/PCT	12.6/ 14/ .0422
NOX SAMPLE METER/RANGE/PPM	.5/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.4/ 1/ .1
DILUTION FACTOR	22.67
THC CONCENTRATION PPM	1.
CO CONCENTRATION PPM	6.
CO2 CONCENTRATION PCT	.4835
NOX CONCENTRATION PPM	.0
THC MASS GRAMS	.06
CO MASS GRAMS	.58
CO2 MASS GRAMS	738.1
NOX MASS GRAMS	.00
RUN TIME SECONDS	595.
DFC, WET (DRY)	.956 (.940)
SCF, WET (DRY)	1.000 (.974)
VOL (SCM)	83.4
SAM BLR (SCM)	.00
MI (MEASURED)	1.18

TEST NUMBER,		B2VHC-01A
BAROMETER,	MM HG	744.7
HUMIDITY,	G/KG	9.3
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	627.2
FUEL ECONOMY,	MPG	7.6
HYDROCARBONS, (THC)	G/MI	.05
CARBON MONOXIDE,	G/MI	.49
OXIDES OF NITROGEN,	G/MI	.00

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

TEST NO. B1VBL-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 12/18/90
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1162-F
ODOMETER 29342. KM(18232. MILES)

BAROMETER 738.89 MM HG(29.09 IN HG)
RELATIVE HUMIDITY 26. PCT
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 4.6 GM/KG

NOX HUMIDITY CORRECTION FACTOR .83

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	789.9 (31.1)	800.1 (31.5)	800.1 (31.5)	800.1 (31.5)
BLOWER INLET P MM. H2O(IN. H2O)	784.9 (30.9)	795.0 (31.3)	795.0 (31.3)	795.0 (31.3)
BLOWER INLET TEMP. DEG. C(DEG. F)	42.2 (108.0)	38.3 (101.0)	40.0 (104.0)	38.3 (101.0)
BLOWER REVOLUTIONS	40529.	69479.	40500.	69442.
TOT FLOW STD. CU. METRES(SCF)	75.0 (2647.)	129.3 (4564.)	75.1 (2652.)	129.2 (4562.)
THC SAMPLE METER/RANGE/PPM	52.6/ 2/ 53.	15.3/ 2/ 15.	20.4/ 2/ 20.	14.9/ 2/ 15.
THC BCKGRD METER/RANGE/PPM	7.9/ 2/ 8.	7.9/ 2/ 8.	7.9/ 2/ 8.	8.1/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	63.7/ 14/ 294.	29.3/ 12/ 29.	69.6/ 12/ 69.	26.9/ 12/ 27.
CO BCKGRD METER/RANGE/PPM	.4/ 14/ 2.	.9/ 12/ 1.	.9/ 12/ 1.	.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	95.5/ 14/1.0120	78.3/ 14/ .6289	90.7/ 14/ .8941	76.8/ 14/ .603
CO2 BCKGRD METER/RANGE/PCT	12.5/ 14/ .0418	12.4/ 14/ .0415	12.3/ 14/ .0411	12.2/ 14/ .040
NOX SAMPLE METER/RANGE/PPM	30.5/ 1/ 7.7	1.4/ 1/ .4	4.6/ 1/ 1.2	1.2/ 1/ .3
NOX BCKGRD METER/RANGE/PPM	1.0/ 1/ .3	.9/ 1/ .2	.7/ 1/ .2	.6/ 1/ .2
DILUTION FACTOR	12.81	21.16	15.01	22.05
THC CONCENTRATION PPM	45.	8.	13.	7.
CO CONCENTRATION PPM	285.	28.	67.	26.
CO2 CONCENTRATION PCT	.9735	.5894	.8458	.5646
NOX CONCENTRATION PPM	7.5	.1	1.0	.2
THC MASS GRAMS	1.96	.58	.56	.53
CO MASS GRAMS	24.85	4.17	5.84	3.89
CO2 MASS GRAMS	1336.0	1394.9	1163.0	1335.5
NOX MASS GRAMS	.89	.03	.12	.03
THC GRAMS/MI	.54	.15	.16	.14
CO GRAMS/MI	6.89	1.07	1.64	1.01
CO2 GRAMS/MI	370.5	357.4	326.2	345.2
NOX GRAMS/MI	.25	.01	.03	.01
FUEL ECONOMY IN MPG	23.15	24.67	26.93	25.54
RUN TIME SECONDS	505.	867.	506.	868.
MEASURED DISTANCE MI	3.61	7.51	3.90	3.56	7.43	3.87
SCF, DRY	.982	.984	.986	.983	.985	.986
DFC, WET (DRY)		.941(.933)			.947(.939)	
TOT VOL (SCM) / SAM BLR (SCM)		204.2/ .00			204.3/ .00	

COMPOSITE RESULTS

			3-BAG	(4-
TEST NUMBER		B1VBL-01		
BAROMETER	MM HG	738.9		
HUMIDITY	G/KG	4.6		
TEMPERATURE	DEG C	22.8		
CARBON DIOXIDE	G/MI		351.6	(34
FUEL ECONOMY	MPG		24.90	(25
HYDROCARBONS (THC)	G/MI		.23	(
CARBON MONOXIDE	G/MI		2.43	(2
OXIDES OF NITROGEN	G/MI		.86	(

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

TEST NO. B1VBL-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 22. PCT

VEHICLE NO. M100
DATE 12/18/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 4.2 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1162-F
ODOMETER 29366. KM(18247. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

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)		41.1 (106.0)
BLOWER REVOLUTIONS		61359.
TOT FLOW STD. CU. METRES(SCF)		113.4 (4004.)
THC SAMPLE METER/RANGE/PPM		29.8/ 2/ 30.
THC BCKGRD METER/RANGE/PPM		8.0/ 2/ 8.
CO SAMPLE METER/RANGE/PPM		67.4/ 13/ 161.
CO BCKGRD METER/RANGE/PPM		.4/ 13/ 1.
CO2 SAMPLE METER/RANGE/PCT		68.5/ 1/1.2612
CO2 BCKGRD METER/RANGE/PCT		2.4/ 1/ .0423
NOX SAMPLE METER/RANGE/PPM		4.5/ 1/ 1.2
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		10.47
THC CONCENTRATION PPM		23.
CO CONCENTRATION PPM		155.
CO2 CONCENTRATION PCT		1.2229
NOX CONCENTRATION PPM		1.1
THC MASS GRAMS		1.47
CO MASS GRAMS		20.48
CO2 MASS GRAMS		2539.1
NOX MASS GRAMS		.19
RUN TIME	SECONDS	767.
DFC, WET (DRY)		.904 (.898)
SCF, WET (DRY)		1.000 (.981)
VOL (SCM)		113.4
SAM BLR (SCM)		.00
MI (MEASURED)		10.17
TEST NUMBER,		B1VBL-01
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	4.2
TEMPERATURE,	DEG C	23.9
CARBON DIOXIDE,	G/MI	249.6
FUEL ECONOMY,	MPG	35.0
HYDROCARBONS, (THC)	G/MI	.14
CARBON MONOXIDE,	G/MI	2.01
OXIDES OF NITROGEN,	G/MI	.02

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

TEST NO. B1VBL-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 12/18/90
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1168-F
ODOMETER 29383. KM(18258. MILES)
C = .856 H = .134 O = .000
FUEL DENSITY = 6.16

BAROMETER 737.87 MM HG(29.05 IN HG)
RELATIVE HUMIDITY 24. PCT
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 4.4 GM/KG

NOX HUMIDITY CORRECTION FACTOR .83

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		795.0 (31.3)
BLOWER INLET P MM. H2O(IN. H2O)		789.9 (31.1)
BLOWER INLET TEMP. DEG. C(DEG. F)		41.1 (106.0)
BLOWER REVOLUTIONS		47684.
TOT FLOW STD. CU. METRES(SCF)		88.2 (3113.)
THC SAMPLE METER/RANGE/PPM		11.8/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		7.9/ 2/ 8.
CO SAMPLE METER/RANGE/PPM		10.3/ 12/ 10.
CO BCKGRD METER/RANGE/PPM		.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		69.5/ 14/ .4925
CO2 BCKGRD METER/RANGE/PCT		12.1/ 14/ .3403
NOX SAMPLE METER/RANGE/PPM		.5/ 1/ .2
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		27.09
THC CONCENTRATION PPM		4.
CO CONCENTRATION PPM		10.
CO2 CONCENTRATION PCT		.4537
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.21
CO MASS GRAMS		1.01
CO2 MASS GRAMS		732.3
NOX MASS GRAMS		.01
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.963 (.956)
DCF, WET (DRY)		1.000 (.988)
VOL (SCM)		88.2
SAM BLR (SCM)		.00
MI (MEASURED)		1.18

TEST NUMBER,		B1VBL-01
BAROMETER,	MM HG	737.9
HUMIDITY,	G/KG	4.4
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	620.4
FUEL ECONOMY,	MPG	14.3
HYDROCARBONS, (THC)	G/MI	.18
CARBON MONOXIDE,	G/MI	.85
OXIDES OF NITROGEN,	G/MI	.01

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

TEST NO. B1VJM-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 5/13/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29607. KM(18397. MILES)

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 68. PCT

DRY BULB TEMP. 21.1 DEG C(70.0 DEG F)
ABS. HUMIDITY 11.0 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.01

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)	43.3 (110.0)	38.9 (102.0)	41.7 (107.0)	40.6 (105.0)
BLOWER REVOLUTIONS	40133.	68920.	39993.	68807.
TOT FLOW STD. CU. METRES(SCF)	71.6 (2528.)	124.8 (4406.)	71.7 (2533.)	123.9 (4374.)
THC SAMPLE METER/RANGE/PPM	49.0/ 2/ 49.	13.5/ 2/ 13.	15.5/ 2/ 15.	13.7/ 2/ 14.
THC BCKGRD METER/RANGE/PPM	12.6/ 2/ 13.	13.8/ 2/ 14.	14.5/ 2/ 14.	14.0/ 2/ 14.
CO SAMPLE METER/RANGE/PPM	56.4/ 14/ 255.	3.5/ 12/ 4.	15.0/ 12/ 15.	3.5/ 12/ 4.
CO BCKGRD METER/RANGE/PPM	.8/ 14/ 3.	3.4/ 12/ 3.	3.2/ 12/ 3.	3.5/ 12/ 4.
CO2 SAMPLE METER/RANGE/PCT	54.5/ 1/1.0102	78.5/ 14/ .6323	90.4/ 14/ .8768	77.2/ 14/ .6102
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	13.7/ 14/ .0466	13.7/ 14/ .0466	14.3/ 14/ .0490
NOX SAMPLE METER/RANGE/PPM	11.1/ 1/ 2.9	20.2/ 1/ 5.2	17.8/ 1/ 4.6	22.0/ 1/ 5.6
NOX BCKGRD METER/RANGE/PPM	1.5/ 1/ .4	1.7/ 1/ .4	1.7/ 1/ .4	2.4/ 1/ .6
DILUTION FACTOR	12.89	21.13	15.23	21.90
THC CONCENTRATION PPM	37.	0.	2.	0.
CO CONCENTRATION PPM	242.	0.	11.	0.
CO2 CONCENTRATION PCT	.9698	.5880	.8332	.5634
NOX CONCENTRATION PPM	2.5	4.7	4.1	5.0
THC MASS GRAMS	1.54	.03	.08	.02
CO MASS GRAMS	20.14	.03	.96	.02
CO2 MASS GRAMS	1271.2	1343.3	1094.3	1277.7
NOX MASS GRAMS	.35	1.14	.57	1.20
THC GRAMS/MI	.43	.01	.02	.01
CO GRAMS/MI	5.55	.01	.27	.00
CO2 GRAMS/MI	350.5	344.8	304.0	328.9
NOX GRAMS/MI	.10	.29	.16	.31
FUEL ECONOMY IN MPG	24.60 25.16	25.71	29.12 27.96	26.96
RUN TIME SECONDS	504.	868.	504.	868.
MEASURED DISTANCE MI	3.63 7.52	3.90	3.60 7.48	3.88
SCF, DRY	.969 .971	.972	.970 .971	.972
DPC, WET (DRY)	.942(.921)		.947(.926)	
TOT VOL (SCM) / SAM BLR (SCM)	196.4/ .00		195.6/ .00	

COMPOSITE RESULTS

TEST NUMBER		B1VJM-01
BAROMETER	MM HG	738.1
HUMIDITY	G/KG	11.0
TEMPERATURE	DEG C	21.1

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	334.8	(330.1)
FUEL ECONOMY	MPG	26.31	(26.68)
HYDROCARBONS (THC)	G/MI	.10	(.10)
CARBON MONOXIDE	G/MI	1.23	(1.23)
OXIDES OF NITROGEN	G/MI	.22	(.22)

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

TEST NO. B1VJM-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.38 MM HG(29.07 IN HG)
RELATIVE HUMIDITY 65. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 5/13/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29633. KM(18413. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR 1.02

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)		43.9 (111.0)
BLOWER REVOLUTIONS		60776.
TOT FLOW STD. CU. METRES(SCF)		108.3 (3823.)
THC SAMPLE METER/RANGE/PPM		19.1/ 2/ 19.
THC BCKGRD METER/RANGE/PPM		13.0/ 2/ 13.
CO SAMPLE METER/RANGE/PPM		68.2/ 12/ 68.
CO BCKGRD METER/RANGE/PPM		3.0/ 12/ 3.
CO2 SAMPLE METER/RANGE/PCT		69.2/ 1/1.2796
CO2 BCKGRD METER/RANGE/PCT		2.7/ 1/ .0473
NOX SAMPLE METER/RANGE/PPM		14.0/ 1/ 3.6
NOX BCKGRD METER/RANGE/PPM		2.0/ 1/ .5
DILUTION FACTOR		10.40
THC CONCENTRATION PPM		7.
CO CONCENTRATION PPM		62.
CO2 CONCENTRATION PCT		1.2368
NOX CONCENTRATION PPM		3.1
THC MASS GRAMS		.46
CO MASS GRAMS		7.85
CO2 MASS GRAMS		2451.6
NOX MASS GRAMS		.66
RUN TIME	SECONDS	765.
DPC, WET (DRY)		.904 (.885)
SCF, WET (DRY)		1.000 (.967)
VOL (SCM)		108.3
SAM BLR (SCM)		.00
MI (MEASURED)		10.26
TEST NUMBER,		B1VJM-01
BAROMETER,	MM HG	738.4
HUMIDITY,	G/KG	11.2
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	238.9
FUEL ECONOMY,	MPG	36.9
HYDROCARBONS, (THC)	G/MI	.04
CARBON MONOXIDE,	G/MI	.76
OXIDES OF NITROGEN,	G/MI	.06

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

TEST NO. B1VJH-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 738.38 MM HG(29.07 IN HG)
RELATIVE HUMIDITY 65. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 5/13/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29649. KM(18423. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR 1.02

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		47471.
TOT FLOW STD. CU. METRES(SCF)		85.0 (3002.)
THC SAMPLE METER/RANGE/PPM		13.4/ 2/ 13.
THC BCKGRD METER/RANGE/PPM		13.3/ 2/ 13.
CO SAMPLE METER/RANGE/PPM		5.7/ 12/ 6.
CO BCKGRD METER/RANGE/PPM		3.3/ 12/ 3.
CO2 SAMPLE METER/RANGE/PCT		68.9/ 14/ .4842
CO2 BCKGRD METER/RANGE/PCT		14.3/ 14/ .0490
NOX SAMPLE METER/RANGE/PPM		11.7/ 1/ 3.0
NOX BCKGRD METER/RANGE/PPM		2.0/ 1/ .5
DILUTION FACTOR		27.57
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		2.
CO2 CONCENTRATION PCT		.4370
NOX CONCENTRATION PPM		2.5
THC MASS GRAMS		.03
CO MASS GRAMS		.24
CO2 MASS GRAMS		680.1
NOX MASS GRAMS		.42
RUN TIME	SECONDS	599.
DFC, WET (DRY)		.964 (.943)
SCF, WET (DRY)		1.000 (.975)
VOL (SCM)		85.0
SAM BLR (SCM)		.00
MI (MEASURED)		1.16
TEST NUMBER,		B1VJH-01
BAROMETER,	MM HG	738.4
HUMIDITY,	G/KG	11.2
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	583.8
FUEL ECONOMY,	MPG	15.2
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.21
OXIDES OF NITROGEN,	G/MI	.36

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

TEST NO. B1VJM-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 5/14/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29651. KM(18424. MILES)

BAROMETER 735.33 MM HG(28.95 IN HG)
RELATIVE HUMIDITY 69. PCT
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 12.0 GM/KG
NOX HUMIDITY CORRECTION FACTOR 1.04

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)	40.6 (105.0)	37.8 (100.0)	40.6 (105.0)	37.8 (100.0)
BLOWER REVOLUTIONS	40205.	68956.	39945.	68606.
TOT FLOW STD. CU. METRES(SCF)	72.1 (2545.)	124.8 (4406.)	71.6 (2528.)	124.1 (4382.)
THC SAMPLE METER/RANGE/PPM	42.5/ 2/ 42.	15.7/ 2/ 16.	16.5/ 2/ 16.	14.9/ 2/ 15.
THC BCKGRD METER/RANGE/PPM	14.8/ 2/ 15.	15.9/ 2/ 16.	15.3/ 2/ 15.	15.4/ 2/ 15.
CO SAMPLE METER/RANGE/PPM	92.8/ 13/ 229.	2.1/ 12/ 2.	14.2/ 12/ 14.	2.9/ 12/ 3.
CO BCKGRD METER/RANGE/PPM	.6/ 13/ 1.	2.1/ 12/ 2.	2.3/ 12/ 2.	2.8/ 12/ 3.
CO2 SAMPLE METER/RANGE/PCT	94.7/ 14/ .9892	77.7/ 14/ .6186	90.8/ 14/ .8866	77.7/ 14/ .6186
CO2 BCKGRD METER/RANGE/PCT	13.0/ 14/ .0438	13.6/ 14/ .0462	14.0/ 14/ .0478	14.2/ 14/ .0486
NOX SAMPLE METER/RANGE/PPM	17.4/ 1/ 4.5	17.0/ 1/ 4.4	16.0/ 1/ 4.1	12.0/ 1/ 3.1
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	1.5/ 1/ .4	2.0/ 1/ .5	1.7/ 1/ .4
DILUTION FACTOR	13.20	21.60	15.06	21.60
THC CONCENTRATION PPM	29.	1.	2.	0.
CO CONCENTRATION PPM	218.	0.	12.	0.
CO2 CONCENTRATION PCT	.9488	.5746	.8420	.5723
NOX CONCENTRATION PPM	4.2	4.0	3.6	2.7
THC MASS GRAMS	1.20	.04	.09	.02
CO MASS GRAMS	18.30	.01	.96	.03
CO2 MASS GRAMS	1252.1	1312.5	1103.6	1300.1
NOX MASS GRAMS	.60	.99	.52	.66
THC GRAMS/MI	.33	.01	.03	.00
CO GRAMS/MI	5.10	.00	.27	.01
CO2 GRAMS/MI	349.0	338.8	308.7	338.3
NOX GRAMS/MI	.17	.26	.14	.17
FUEL ECONOMY IN MPG	24.77 25.48	26.17	28.68 27.35	26.21
RUN TIME SECONDS	505.	868.	504.	868.
MEASURED DISTANCE MI	3.59 7.46	3.87	3.57 7.42	3.84
SCF, DRY	.969 .971	.972	.969 .971	.972
DFC, WET (DRY)	.943(.922)		.946(.925)	
TOT VOL (SCM) / SAM BLR (SCM)	196.9/ .00		195.7/ .00	

COMPOSITE RESULTS

TEST NUMBER		B1VJM-02
BAROMETER	MM HG	735.3
HUMIDITY	G/KG	12.0
TEMPERATURE	DEG C	22.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	332.7	(332.5)
FUEL ECONOMY	MPG	26.49	(26.51)
HYDROCARBONS (THC)	G/MI	.08	(.08)
CARBON MONOXIDE	G/MI	1.13	(1.13)
OXIDES OF NITROGEN	G/MI	.21	(.18)

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

TEST NO. B1VJH-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 735.58 MM HG(28.96 IN HG)
RELATIVE HUMIDITY 69. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 5/14/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 12.5 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29676. KM(18440. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR 1.06

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		60564.
TOT FLOW STD. CU. METRES(SCF)		108.0 (3813.)
THC SAMPLE METER/RANGE/PPM		24.8/ 2/ 25.
THC BCKGRD METER/RANGE/PPM		17.1/ 2/ 17.
CO SAMPLE METER/RANGE/PPM		75.9/ 12/ 76.
CO BCKGRD METER/RANGE/PPM		2.4/ 12/ 2.
CO2 SAMPLE METER/RANGE/PCT		68.3/ 1/1.2631
CO2 BCKGRD METER/RANGE/PCT		2.9/ 1/ .0508
NOX SAMPLE METER/RANGE/PPM		7.9/ 1/ 2.1
NOX BCKGRD METER/RANGE/PPM		1.9/ 1/ .5
DILUTION FACTOR		10.53
THC CONCENTRATION PPM		9.
CO CONCENTRATION PPM		70.
CO2 CONCENTRATION PCT		1.2171
NOX CONCENTRATION PPM		1.6
THC MASS GRAMS		.58
CO MASS GRAMS		8.82
CO2 MASS GRAMS		2406.0
NOX MASS GRAMS		.35
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.905 (.885)
SCF, WET (DRY)		1.000 (.966)
VOL (SCM)		108.0
SAM BLR (SCM)		.00
MI (MEASURED)		10.18
TEST NUMBER,		B1VJH-02
BAROMETER,	MM HG	735.6
HUMIDITY,	G/KG	12.5
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	236.5
FUEL ECONOMY,	MPG	37.3
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.87
OXIDES OF NITROGEN,	G/MI	.03

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PROJECT 08-3381-001

TEST NO. B1VJH-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 735.58 MM HG(28.96 IN HG)
RELATIVE HUMIDITY 69. PCT

VEHICLE NO.M100
DATE 5/14/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 12.5 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1235-F
ODOMETER 29692. KM(18450. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR 1.06

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)	42.8 (109.0)
BLOWER REVOLUTIONS	47412.
TOT FLOW STD. CU. METRES(SCF)	84.4 (2979.)
THC SAMPLE METER/RANGE/PPM	15.9/ 2/ 16.
THC BCKGRD METER/RANGE/PPM	15.9/ 2/ 16.
CO SAMPLE METER/RANGE/PPM	6.3/ 12/ 6.
CO BCKGRD METER/RANGE/PPM	2.1/ 12/ 2.
CO2 SAMPLE METER/RANGE/PCT	69.9/ 14/ .4981
CO2 BCKGRD METER/RANGE/PCT	13.5/ 14/ .0458
NOX SAMPLE METER/RANGE/PPM	6.4/ 1/ 1.7
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3
DILUTION FACTOR	26.79
THC CONCENTRATION PPM	1.
CO CONCENTRATION PPM	4.
CO2 CONCENTRATION PCT	.4540
NOX CONCENTRATION PPM	1.4
THC MASS GRAMS	.03
CO MASS GRAMS	.41
CO2 MASS GRAMS	701.3
NOX MASS GRAMS	.23
RUN TIME SECONDS	599.
DFC, WET (DRY)	.963 (.941)
SCF, WET (DRY)	1.000 (.973)
VOL (SCM)	84.4
SAM BLR (SCM)	.00
MI (MEASURED)	1.15
TEST NUMBER,	B1VJH-02
BAROMETER, MM HG	735.6
HUMIDITY, G/KG	12.5
TEMPERATURE, DEG C	22.8
CARBON DIOXIDE, G/MI	607.8
FUEL ECONOMY, MPG	14.6
HYDROCARBONS, (THC) G/MI	.03
CARBON MONOXIDE, G/MI	.35
OXIDES OF NITROGEN, G/MI	.20

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PROJECT 08-3734-001

TEST NO. B1VDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 7/22/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29887. KM(18571. MILES)

BAROMETER 743.97 MM HG(29.29 IN HG)
RELATIVE HUMIDITY 64. PCT
DRY BULB TEMP. 21.1 DEG C(70.0 DEG F)
ABS. HUMIDITY 10.2 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)	1054.1 (41.5)	1041.4 (41.0)	1041.4 (41.0)	1041.4 (41.0)
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)	40.6 (105.0)	42.8 (109.0)	40.0 (104.0)
BLOWER REVOLUTIONS	40160.	68905.	40041.	68715.
TOT FLOW STD. CU. METRES(SCF)	71.4 (2523.)	123.0 (4343.)	71.2 (2513.)	122.8 (4335.)
THC SAMPLE METER/RANGE/PPM	36.5/ 2/ 36.	20.4/ 2/ 20.	24.8/ 2/ 25.	20.0/ 2/ 20.
THC BCKGRD METER/RANGE/PPM	9.1/ 2/ 9.	10.3/ 2/ 10.	10.5/ 2/ 10.	10.8/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	58.9/ 13/ 139.	10.8/ 12/ 11.	28.0/ 12/ 28.	11.1/ 12/ 11.
CO BCKGRD METER/RANGE/PPM	.3/ 13/ 1.	.6/ 12/ 1.	.4/ 12/ 0.	.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	57.9/ 1/1.0726	81.3/ 14/ .6828	93.9/ 14/ .9671	80.5/ 14/ .6680
CO2 BCKGRD METER/RANGE/PCT	2.7/ 1/ .0473	13.8/ 14/ .0470	14.0/ 14/ .0478	14.1/ 14/ .0482
NOX SAMPLE METER/RANGE/PPM	10.6/ 1/ 2.7	.2/ 1/ .1	.3/ 1/ .1	.3/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.1/ 1/ .0	.1/ 1/ .0	.0/ 1/ .0	.1/ 1/ .0
DILUTION FACTOR	12.30	19.54	13.78	19.97
THC CONCENTRATION PPM	28.	11.	15.	10.
CO CONCENTRATION PPM	133.	10.	26.	10.
CO2 CONCENTRATION PCT	1.0292	.6382	.9227	.6222
NOX CONCENTRATION PPM	2.7	.0	.1	.1
THC MASS GRAMS	1.16	.75	.62	.69
CO MASS GRAMS	11.05	1.42	2.19	1.49
CO2 MASS GRAMS	1346.3	1437.0	1202.4	1398.4
NOX MASS GRAMS	.37	.01	.01	.01
THC GRAMS/MI	.32	.19	.17	.18
CO GRAMS/MI	3.08	.36	.61	.39
CO2 GRAMS/MI	375.1	368.3	337.5	363.5
NOX GRAMS/MI	.10	.00	.00	.00
FUEL ECONOMY IN MPG	23.28 23.65	24.00	26.16 25.17	24.31
RUN TIME SECONDS	504.	867.	505.	867.
MEASURED DISTANCE MI	3.59 7.49	3.90	3.56 7.41	3.85
SCF, DRY	.969 .972	.973	.970 .972	.973
DFC, WET (DRY)	.938(.918)		.942(.922)	
TOT VOL (SCM) / SAM BLR (SCM)	194.4/ .00		193.9/ .00	

COMPOSITE RESULTS

TEST NUMBER		B1VDC-03
BAROMETER	MM HG	744.0
HUMIDITY	G/KG	10.2
TEMPERATURE	DEG C	21.1

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	361.4	(359.9)
FUEL ECONOMY	MPG	24.39	(24.49)
HYDROCARBONS (THC)	G/MI	.21	(.21)
CARBON MONOXIDE	G/MI	.99	(1.00)
OXIDES OF NITROGEN	G/MI	.02	(.02)

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B1VDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 740.66 MM HG(29.16 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 7/18/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29802. KM(18518. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)		1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		60556.
TOT FLOW STD. CU. METRES(SCF)		106.7 (3768.)
THC SAMPLE METER/RANGE/PPM		25.0/ 2/ 25.
THC BCKGRD METER/RANGE/PPM		13.1/ 2/ 13.
CO SAMPLE METER/RANGE/PPM		76.0/ 12/ 76.
CO BCKGRD METER/RANGE/PPM		.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		73.3/ 1/1.3549
CO2 BCKGRD METER/RANGE/PCT		2.9/ 1/ .0508
NOX SAMPLE METER/RANGE/PPM		2.9/ 1/ .8
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		9.82
THC CONCENTRATION PPM		13.
CO CONCENTRATION PPM		72.
CO2 CONCENTRATION PCT		1.3092
NOX CONCENTRATION PPM		.7
THC MASS GRAMS		.81
CO MASS GRAMS		8.94
CO2 MASS GRAMS		2558.0
NOX MASS GRAMS		.14
RUN TIME	SECONDS	766.
DPC, WET (DRY)		.898 (.882)
SCF, WET (DRY)		1.000 (.970)
VOL (SCM)		106.7
SAM BLR (SCM)		.00
MI (MEASURED)		10.12

TEST NUMBER,		B1VDC-01
BAROMETER,	MM HG	740.7
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	252.8
FUEL ECONOMY,	MPG	34.9
HYDROCARBONS, (THC)	G/MI	.08
CARBON MONOXIDE,	G/MI	.88
OXIDES OF NITROGEN,	G/MI	.01

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B1VDC-01 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 740.66 MM HG(29.16 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 7/18/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29816. KM(18527. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47519.
TOT FLOW STD. CU. METRES(SCF)		83.9 (2962.)
THC SAMPLE METER/RANGE/PPM		12.9/ 2/ 13.
THC BCKGRD METER/RANGE/PPM		12.4/ 2/ 12.
CO SAMPLE METER/RANGE/PPM		5.2/ 12/ 5.
CO BCKGRD METER/RANGE/PPM		.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		73.1/ 14/ .5448
CO2 BCKGRD METER/RANGE/PCT		15.5/ 14/ .0540
NOX SAMPLE METER/RANGE/PPM		1.5/ 1/ .4
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		24.52
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		4.
CO2 CONCENTRATION PCT		.4930
NOX CONCENTRATION PPM		.3
THC MASS GRAMS		.05
CO MASS GRAMS		.42
CO2 MASS GRAMS		757.3
NOX MASS GRAMS		.05
RUN TIME	SECONDS	601.
DPC, WET (DRY)		.959 (.942)
SCF, WET (DRY)		1.000 (.977)
VOL (SCM)		83.9
SAM BLR (SCM)		.00
MI (MEASURED)		1.14

TEST NUMBER,		B1VDC-01
BAROMETER,	MM HG	740.7
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	666.4
FUEL ECONOMY,	MPG	13.3
HYDROCARBONS, (THC)	G/MI	.04
CARBON MONOXIDE,	G/MI	.37
OXIDES OF NITROGEN,	G/MI	.04

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TEST NO. B1VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 7/19/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29826. KM(18533. MILES)

BAROMETER 740.41 MM HG(29.15 IN HG)
RELATIVE HUMIDITY 60. PCT

DRY BULB TEMP. 21.7 DEG C(71.0 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)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)
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)	41.1 (106.0)	38.9 (102.0)	42.8 (109.0)	40.0 (104.0)
BLOWER REVOLUTIONS	40104.	68799.	40026.	68711.
TOT FLOW STD. CU. METRES(SCF)	71.1 (2510.)	122.5 (4324.)	70.7 (2497.)	122.0 (4309.)
THC SAMPLE METER/RANGE/PPM	43.7/ 2/ 44.	19.4/ 2/ 19.	23.7/ 2/ 24.	20.6/ 2/ 21.
THC BCKGRD METER/RANGE/PPM	8.7/ 2/ 9.	9.3/ 2/ 9.	9.9/ 2/ 10.	11.0/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	74.7/ 13/ 180.	9.2/ 12/ 9.	23.7/ 12/ 24.	10.3/ 12/ 10.
CO BCKGRD METER/RANGE/PPM	.4/ 13/ 1.	.9/ 12/ 1.	.8/ 12/ 1.	.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	57.7/ 1/1.0690	81.4/ 14/ .6846	93.8/ 14/ .9643	80.5/ 14/ .6680
CO2 BCKGRD METER/RANGE/PCT	2.8/ 1/ .0490	14.5/ 14/ .0498	14.8/ 14/ .0510	15.1/ 14/ .0523
NOX SAMPLE METER/RANGE/PPM	12.2/ 1/ 3.2	.3/ 1/ .1	.4/ 1/ .1	.4/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.2/ 1/ .1	.2/ 1/ .1	.2/ 1/ .1	.3/ 1/ .1
DILUTION FACTOR	12.29	19.49	13.83	19.97
THC CONCENTRATION PPM	36.	11.	15.	10.
CO CONCENTRATION PPM	172.	8.	22.	9.
CO2 CONCENTRATION PCT	1.0239	.6374	.9170	.6183
NOX CONCENTRATION PPM	3.1	.0	.1	.0
THC MASS GRAMS	1.46	.75	.59	.71
CO MASS GRAMS	14.24	1.16	1.81	1.32
CO2 MASS GRAMS	1332.6	1428.9	1187.3	1381.3
NOX MASS GRAMS	.41	.01	.01	.01
THC GRAMS/MI	.41	.19	.17	.19
CO GRAMS/MI	3.96	.30	.51	.34
CO2 GRAMS/MI	370.4	366.7	333.6	359.6
NOX GRAMS/MI	.11	.00	.00	.00
FUEL ECONOMY IN MPG	23.47	23.80 24.12	26.48	25.46 24.59
RUN TIME SECONDS	505.	868.	505.	867.
MEASURED DISTANCE MI	3.60	7.50 3.90	3.56	7.40 3.84
SCF, DRY	.971	.973 .974	.972	.973 .974
DFC, WET (DRY)		.938(.919)		.942(.923)
TOT VOL (SCM) / SAM BLR (SCM)		193.5/ .00		192.7/ .00

COMPOSITE RESULTS

TEST NUMBER		B1VDC-02
BAROMETER	MM HG	740.4
HUMIDITY	G/KG	10.1
TEMPERATURE	DEG C	21.7

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	358.4	(356.3)
FUEL ECONOMY	MPG	24.57	(24.72)
HYDROCARBONS (THC)	G/MI	.23	(.23)
CARBON MONOXIDE	G/MI	1.11	(1.12)
OXIDES OF NITROGEN	G/MI	.03	(.03)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-3734-001

TEST NO. B1VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 740.16 MM HG(29.14 IN HG)
RELATIVE HUMIDITY 58. PCT
BAG RESULTS

VEHICLE NO.M100
DATE 7/19/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 10.3 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29852. KM(18549. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .99

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		60618.
TOT FLOW STD. CU. METRES(SCF)		106.9 (3776.)
THC SAMPLE METER/RANGE/PPM		29.9/ 2/ 30.
THC BCKGRD METER/RANGE/PPM		9.7/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		66.5/ 12/ 66.
CO BCKGRD METER/RANGE/PPM		.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		74.7/ 1/1.3807
CO2 BCKGRD METER/RANGE/PCT		2.7/ 1/ .0473
NOX SAMPLE METER/RANGE/PPM		2.9/ 1/ .8
NOX BCKGRD METER/RANGE/PPM		.0/ 1/ .0
DILUTION FACTOR		9.64
THC CONCENTRATION PPM		21.
CO CONCENTRATION PPM		63.
CO2 CONCENTRATION PCT		1.3383
NOX CONCENTRATION PPM		.8
THC MASS GRAMS		1.31
CO MASS GRAMS		7.82
CO2 MASS GRAMS		2620.5
NOX MASS GRAMS		.15
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.896 (.880)
SCF, WET (DRY)		1.000 (.969)
VOL (SCM)		106.9
SAM BLR (SCM)		.00
MI (MEASURED)		10.24
TEST NUMBER,		B1VDC-02
BAROMETER,	MM HG	740.2
HUMIDITY,	G/KG	10.3
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	255.8
FUEL ECONOMY,	MPG	34.4
HYDROCARBONS, (THC)	G/MI	.13
CARBON MONOXIDE,	G/MI	.76
OXIDES OF NITROGEN,	G/MI	.02

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TEST NO. B1VDC-02 RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 740.16 MM HG(29.14 IN HG)
RELATIVE HUMIDITY 59. PCT

VEHICLE NO.M100
DATE 7/19/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 24.4 DEG C(76.0 DEG F)
ABS. HUMIDITY 11.7 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
GASOLINE EM-1273-F
ODOMETER 29868. KM(18559. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR 1.03

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47311.
TOT FLOW STD. CU. METRES(SCF)		83.5 (2947.)
THC SAMPLE METER/RANGE/PPM		9.2/ 2/ 9.
THC BCKGRD METER/RANGE/PPM		8.6/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		6.5/ 12/ 7.
CO BCKGRD METER/RANGE/PPM		.7/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		73.4/ 14/ .5493
CO2 BCKGRD METER/RANGE/PCT		13.3/ 14/ .0450
NOX SAMPLE METER/RANGE/PPM		1.2/ 1/ .3
NOX BCKGRD METER/RANGE/PPM		.1/ 1/ .0
DILUTION FACTOR		24.32
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		6.
CO2 CONCENTRATION PCT		.5062
NOX CONCENTRATION PPM		.3
THC MASS GRAMS		.05
CO MASS GRAMS		.55
CO2 MASS GRAMS		773.5
NOX MASS GRAMS		.05
RUN TIME	SECONDS	598.
DFC, WET (DRY)		.959 (.941)
SCF, WET (DRY)		1.000 (.976)
VOL (SCM)		83.5
SAM BLR (SCM)		.00
MI (MEASURED)		1.15
TEST NUMBER,		B1VDC-02
BAROMETER,	MM HG	740.2
HUMIDITY,	G/KG	11.7
TEMPERATURE,	DEG C	24.4
CARBON DIOXIDE,	G/MI	671.9
FUEL ECONOMY,	MPG	13.2
HYDROCARBONS, (THC)	G/MI	.04
CARBON MONOXIDE,	G/MI	.48
OXIDES OF NITROGEN,	G/MI	.04

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TEST NO. B1VHC-01A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 10/ 2/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30267. KM(18807. MILES)

BAROMETER 739.90 MM HG(29.13 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)	1054.1 (41.5)	1054.1 (41.5)	1054.1 (41.5)	1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)	1117.6 (44.0)	1117.6 (44.0)	1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.9 (111.0)	40.6 (105.0)	44.4 (112.0)	41.1 (106.0)
BLOWER REVOLUTIONS	40148.	68808.	40056.	68573.
TOT FLOW STD. CU. METRES(SCF)	70.8 (2498.)	122.0 (4307.)	70.5 (2490.)	121.2 (4279.)
THC SAMPLE METER/RANGE/PPM	20.8/ 2/ 21.	15.3/ 2/ 15.	17.4/ 2/ 17.	17.8/ 2/ 18.
THC BCKGRD METER/RANGE/PPM	13.8/ 2/ 14.	12.8/ 2/ 13.	12.6/ 2/ 13.	20.9/ 2/ 21.
CO SAMPLE METER/RANGE/PPM	50.6/ 12/ 50.	25.7/ 12/ 26.	32.8/ 12/ 33.	18.9/ 12/ 19.
CO BCKGRD METER/RANGE/PPM	.8/ 12/ 1.	.9/ 12/ 1.	.9/ 12/ 1.	.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	60.5/ 1/1.1203	83.0/ 14/ .7153	93.8/ 14/ .9643	80.3/ 14/ .6643
CO2 BCKGRD METER/RANGE/PCT	2.9/ 1/ .0508	14.5/ 14/ .0498	14.6/ 14/ .0502	14.6/ 14/ .0502
NOX SAMPLE METER/RANGE/PPM	24.0/ 1/ 6.1	.8/ 1/ .2	2.0/ 1/ .5	.4/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.8/ 1/ .2	.7/ 1/ .2	.5/ 1/ .1	.4/ 1/ .1
DILUTION FACTOR	11.89	18.63	13.83	20.06
THC CONCENTRATION PPM	8.	3.	6.	0.
CO CONCENTRATION PPM	48.	24.	31.	18.
CO2 CONCENTRATION PCT	1.0738	.6681	.9177	.6166
NOX CONCENTRATION PPM	5.9	.0	.4	.0
THC MASS GRAMS	.33	.22	.23	.00
CO MASS GRAMS	3.92	3.40	2.51	2.48
CO2 MASS GRAMS	1390.9	1492.1	1184.6	1368.0
NOX MASS GRAMS	.78	.01	.05	.00
THC GRAMS/MI	.09	.06	.07	.00
CO GRAMS/MI	1.11	.88	.71	.64
CO2 GRAMS/MI	393.0	387.7	333.1	353.8
NOX GRAMS/MI	.22	.00	.01	.00
FUEL ECONOMY IN MPG	25.76	25.96 26.14	30.42	29.49 28.68
RUN TIME SECONDS	505.	867.	506.	868.
MEASURED DISTANCE MI	3.54	7.39 3.85	3.56	7.42 3.87
SCF, DRY	.971	.974 .975	.973	.974 .975
DFC, WET (DRY)		.935(.918)		.942(.925)
TOT VOL (SCM) / SAM BLR (SCM)		192.7/ .00		191.7/ .00

COMPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER	B1VHC-01A	CARBON DIOXIDE	G/MI	373.8	(363.8)
BAROMETER	MM HG 739.9	FUEL ECONOMY	MPG	27.10	(27.86)
HUMIDITY	G/KG 9.8	HYDROCARBONS (THC)	G/MI	.07	(.05)
TEMPERATURE	DEG C 22.2	CARBON MONOXIDE	G/MI	.88	(.81)
		OXIDES OF NITROGEN	G/MI	.05	(.05)

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HFET - VEHICLE EMISSIONS RESULTS -
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TEST NO. B1VHC-01A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 739.39 MM HG(29.11 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 10/ 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 9.6 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30291. KM(18822. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 7.07
NOX HUMIDITY CORRECTION FACTOR .96

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)		1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		44.4 (112.0)
BLOWER REVOLUTIONS		60513.
TOT FLOW STD. CU. METRES(SCF)		106.2 (3750.)
THC SAMPLE METER/RANGE/PPM		26.4/ 2/ 26.
THC BCKGRD METER/RANGE/PPM		16.8/ 2/ 17.
CO SAMPLE METER/RANGE/PPM		95.2/ 12/ 95.
CO BCKGRD METER/RANGE/PPM		.7/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		73.0/ 1/1.3493
CO2 BCKGRD METER/RANGE/PCT		2.8/ 1/ .0490
NOX SAMPLE METER/RANGE/PPM		7.5/ 1/ 2.0
NOX BCKGRD METER/RANGE/PPM		.2/ 1/ .1
DILUTION FACTOR		9.84
THC CONCENTRATION PPM		11.
CO CONCENTRATION PPM		91.
CO2 CONCENTRATION PCT		1.3053
NOX CONCENTRATION PPM		1.9
THC MASS GRAMS		.69
CO MASS GRAMS		11.21
CO2 MASS GRAMS		2538.1
NOX MASS GRAMS		.37
RUN TIME	SECONDS	767.
DFC, WET (DRY)		.898 (.883)
SCF, WET (DRY)		1.000 (.970)
VOL (SCM)		106.2
SAM BLR (SCM)		.00
MI (MEASURED)		10.01
TEST NUMBER,		B1VHC-01A
BAROMETER,	MM HG	739.4
HUMIDITY,	G/KG	9.6
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	253.5
FUEL ECONOMY,	MPG	39.8
HYDROCARBONS, (THC)	G/MI	.07
CARBON MONOXIDE,	G/MI	1.12
OXIDES OF NITROGEN,	G/MI	.04

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
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TEST NO. B1VHC-01A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 739.14 MM HG(29.10 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 10/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30307. KM(18832. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 7.07
NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

TEST CYCLE	NYCC
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	44.4 (112.0)
BLOWER REVOLUTIONS	47069.
TOT FLOW STD. CU. METRES(SCF)	82.7 (2922.)
THC SAMPLE METER/RANGE/PPM	23.5/ 2/ 23.
THC BCKGRD METER/RANGE/PPM	20.9/ 2/ 21.
CO SAMPLE METER/RANGE/PPM	47.5/ 12/ 47.
CO BCKGRD METER/RANGE/PPM	.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	73.9/ 14/ .5570
CO2 BCKGRD METER/RANGE/PCT	14.8/ 14/ .0510
NOX SAMPLE METER/RANGE/PPM	1.2/ 1/ .3
NOX BCKGRD METER/RANGE/PPM	.0/ 1/ .0
DILUTION FACTOR	23.76
THC CONCENTRATION PPM	3.
CO CONCENTRATION PPM	45.
CO2 CONCENTRATION PCT	.5081
NOX CONCENTRATION PPM	.3
THC MASS GRAMS	.17
CO MASS GRAMS	4.38
CO2 MASS GRAMS	769.7
NOX MASS GRAMS	.05
RUN TIME SECONDS	595.
DFC, WET (DRY)	.958 (.941)
SCF, WET (DRY)	1.000 (.977)
VOL (SCM)	82.7
SAM BLR (SCM)	.00
MI (MEASURED)	1.17

TEST NUMBER,		B1VHC-01A
BAROMETER,	MM HG	739.1
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	659.0
FUEL ECONOMY,	MPG	15.3
HYDROCARBONS, (THC)	G/MI	.14
CARBON MONOXIDE,	G/MI	3.75
OXIDES OF NITROGEN,	G/MI	.04

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B1VHC-02A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

VEHICLE NO.M100
DATE 10/ 3/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30314. KM(18836. MILES)

BAROMETER 739.90 MM HG(29.13 IN HG)
RELATIVE HUMIDITY 58. PCT

DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.7 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.00

BAG RESULTS

	1 COLD TRANSIENT	2 STABILIZED	3 HOT TRANSIENT	4 STABILIZED
BAG NUMBER				
DESCRIPTION				
BLOWER DIF P MM. H2O(IN. H2O)	1054.1 (41.5)	1041.4 (41.0)	1054.1 (41.5)	1054.1 (41.5)
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)	42.8 (109.0)	40.6 (105.0)	43.9 (111.0)	41.1 (106.0)
BLOWER REVOLUTIONS	40089.	68734.	39975.	68574.
TOT FLOW STD. CU. METRES(SCF)	70.8 (2499.)	121.9 (4304.)	70.4 (2487.)	121.4 (4287.)
THC SAMPLE METER/RANGE/PPM	18.4/ 2/ 18.	13.8/ 2/ 14.	18.4/ 2/ 18.	16.4/ 2/ 16.
THC BCKGRD METER/RANGE/PPM	10.4/ 2/ 10.	10.7/ 2/ 11.	12.9/ 2/ 13.	14.3/ 2/ 14.
CO SAMPLE METER/RANGE/PPM	42.3/ 12/ 42.	20.4/ 12/ 20.	41.4/ 12/ 41.	22.3/ 12/ 22.
CO BCKGRD METER/RANGE/PPM	1.1/ 12/ 1.	1.0/ 12/ 1.	.8/ 12/ 1.	.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	60.3/ 1/1.1166	82.1/ 14/ .6979	93.9/ 14/ .9671	80.2/ 14/ .6625
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	13.6/ 14/ .0462	13.6/ 14/ .0462	13.4/ 14/ .0454
NOX SAMPLE METER/RANGE/PPM	24.1/ 1/ 6.1	1.2/ 1/ .3	4.0/ 1/ 1.1	.6/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	1.0/ 1/ .3	.7/ 1/ .2	.6/ 1/ .2
DILUTION FACTOR	11.94	19.11	13.77	20.11
THC CONCENTRATION PPM	9.	4.	6.	3.
CO CONCENTRATION PPM	39.	19.	39.	21.
CO2 CONCENTRATION PCT	1.0766	.6541	.9242	.6194
NOX CONCENTRATION PPM	5.8	.1	.9	.0
THC MASS GRAMS	.36	.26	.26	.20
CO MASS GRAMS	3.24	2.67	3.19	2.98
CO2 MASS GRAMS	1395.0	1459.6	1191.7	1376.7
NOX MASS GRAMS	.79	.02	.12	.00
THC GRAMS/MI	.10	.07	.07	.05
CO GRAMS/MI	.91	.69	.89	.77
CO2 GRAMS/MI	389.9	376.9	332.5	353.5
NOX GRAMS/MI	.22	.00	.03	.00
FUEL ECONOMY IN MPG	25.98 26.46	26.91	30.45 29.50	28.67
RUN TIME SECONDS	506.	868.	505.	868.
MEASURED DISTANCE MI	3.58 7.45	3.87	3.58 7.48	3.89
SCF, DRY	.971 .973	.975	.972 .974	.975
DFC, WET (DRY)	.936(.919)		.942(.924)	
TOT VOL (SCM) / SAM BLR (SCM)	192.7/ .00		191.8/ .00	

COMPOSITE RESULTS

TEST NUMBER		B1VHC-02A
BAROMETER	MM HG	739.9
HUMIDITY	G/KG	10.7
TEMPERATURE	DEG C	23.3

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	367.4	(360.5)
FUEL ECONOMY	MPG	27.59	(28.11)
HYDROCARBONS (THC)	G/MI	.08	(.07)
CARBON MONOXIDE	G/MI	.79	(.81)
OXIDES OF NITROGEN	G/MI	.06	(.06)

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B1VHC-02A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 739.39 MM HG(29.11 IN HG)
RELATIVE HUMIDITY 54. PCT

VEHICLE NO.M100
DATE 10/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30338. KM(18851. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 7.07
NOX HUMIDITY CORRECTION FACTOR .98

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		44.4 (112.0)
BLOWER REVOLUTIONS		60510.
TOT FLOW STD. CU. METRES(SCF)		106.4 (3757.)
THC SAMPLE METER/RANGE/PPM		26.7/ 2/ 27.
THC BCKGRD METER/RANGE/PPM		16.0/ 2/ 16.
CO SAMPLE METER/RANGE/PPM		42.7/ 13/ 99.
CO BCKGRD METER/RANGE/PPM		.0/ 13/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.0/ 1/1.3678
CO2 BCKGRD METER/RANGE/PCT		2.6/ 1/ .0455
NOX SAMPLE METER/RANGE/PPM		9.6/ 1/ 2.5
NOX BCKGRD METER/RANGE/PPM		.8/ 1/ .2
DILUTION FACTOR		9.71
THC CONCENTRATION PPM		12.
CO CONCENTRATION PPM		95.
CO2 CONCENTRATION PCT		1.3270
NOX CONCENTRATION PPM		2.3
THC MASS GRAMS		.76
CO MASS GRAMS		11.75
CO2 MASS GRAMS		2585.1
NOX MASS GRAMS		.46
RUN TIME	SECONDS	766.
DFC, WET (DRY)		.897 (.881)
SCF, WET (DRY)		1.000 (.970)
VOL (SCM)		106.4
SAM BLR (SCM)		.00
MI (MEASURED)		10.26
TEST NUMBER,		B1VHC-02A
BAROMETER,	MM HG	739.4
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	252.0
FUEL ECONOMY,	MPG	40.1
HYDROCARBONS, (THC)	G/MI	.07
CARBON MONOXIDE,	G/MI	1.15
OXIDES OF NITROGEN,	G/MI	.04

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. B1VHC-02A RUN
VEHICLE MODEL 89 VW JETTA
ENGINE 1.8 L(110. CID) L-4
TRANSMISSION A3

BAROMETER 739.14 MM HG(29.10 IN HG)
RELATIVE HUMIDITY 59. PCT

VEHICLE NO.M100
DATE 10/ 3/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
METHANOL EM-1273-F
ODOMETER 30355. KM(18862. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 7.07
NOX HUMIDITY CORRECTION FACTOR 1.02

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1041.4 (41.0)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		44.4 (112.0)
BLOWER REVOLUTIONS		47046.
TOT FLOW STD. CU. METRES(SCF)		82.7 (2921.)
THC SAMPLE METER/RANGE/PPM		24.4/ 2/ 24.
THC BCKGRD METER/RANGE/PPM		20.6/ 2/ 21.
CO SAMPLE METER/RANGE/PPM		56.3/ 12/ 56.
CO BCKGRD METER/RANGE/PPM		.1/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		73.5/ 14/ .5509
CO2 BCKGRD METER/RANGE/PCT		12.5/ 14/ .0418
NOX SAMPLE METER/RANGE/PPM		1.9/ 1/ .5
NOX BCKGRD METER/RANGE/PPM		.0/ 1/ .0
DILUTION FACTOR		23.98
THC CONCENTRATION PPM		5.
CO CONCENTRATION PPM		54.
CO2 CONCENTRATION PCT		.5108
NOX CONCENTRATION PPM		.5
THC MASS GRAMS		.22
CO MASS GRAMS		5.23
CO2 MASS GRAMS		773.6
NOX MASS GRAMS		.08
RUN TIME	SECONDS	595.
DFC, WET (DRY)		.958 (.940)
SCF, WET (DRY)		1.000 (.976)
VOL (SCM)		82.7
SAM BLR (SCM)		.00
MI (MEASURED)		1.16

TEST NUMBER,		B1VHC-02A
BAROMETER,	MM HG	739.1
HUMIDITY,	G/KG	11.2
TEMPERATURE,	DEG C	23.9
CARBON DIOXIDE,	G/MI	664.8
FUEL ECONOMY,	MPG	15.1
HYDROCARBONS, (THC)	G/MI	.19
CARBON MONOXIDE,	G/MI	4.49
OXIDES OF NITROGEN,	G/MI	.07

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-5102-001

NO. J2HC/OEM-1 RUN
CLE MODEL 89 VW JETTA
NE 1.8 L(110. CID) L-4
SMISSION A3

METER 734.82 MM HG(28.93 IN HG)
TIVE HUMIDITY 56. PCT
RESULTS
AG NUMBER
ESCRIPTION

VEHICLE NO.M100
DATE 11/ 3/92
BAG CART NO. 2 / CVS NO. 8
DYNO NO. 2

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
M85 EM-1179-F
ODOMETER 30956. KM(19235. MILES)

DRY BULB TEMP. 21.1 DEG C(70.0 DEG F)
ABS. HUMIDITY 9.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR .95

	1 COLD TRANSIENT	2 STABILIZED	3 HOT TRANSIENT	4 STABILIZED
LOWER DIF P MM. H2O(IN. H2O)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)
LOWER INLET P MM. H2O(IN. H2O)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)
LOWER INLET TEMP. DEG. C(DEG. F)	42.2 (108.0)	41.1 (106.0)	41.1 (106.0)	38.9 (102.0)
LOWER REVOLUTIONS	19160.	32861.	19117.	32832.
OT FLOW STD. CU. METRES(SCF)	131.1 (4629.)	225.5 (7962.)	131.2 (4632.)	226.6 (8002.)
HC SAMPLE METER/RANGE/PPM	13.6/ 2/ 14.	11.6/ 2/ 12.	10.4/ 2/ 10.	11.1/ 2/ 11.
HC BCKGRD METER/RANGE/PPM	9.1/ 2/ 9.	11.5/ 2/ 11.	9.8/ 2/ 10.	10.9/ 2/ 11.
O SAMPLE METER/RANGE/PPM	39.0/ 12/ 38.	10.1/ 12/ 10.	16.0/ 12/ 15.	9.4/ 12/ 9.
O BCKGRD METER/RANGE/PPM	1.7/ 12/ 2.	1.4/ 12/ 1.	1.4/ 12/ 1.	1.7/ 12/ 2.
O2 SAMPLE METER/RANGE/PCT	76.8/ 14/ .6035	60.6/ 14/ .3804	72.1/ 14/ .5298	59.9/ 14/ .3725
O2 BCKGRD METER/RANGE/PCT	14.0/ 14/ .0478	14.1/ 14/ .0482	14.0/ 14/ .0478	14.1/ 14/ .0482
OX SAMPLE METER/RANGE/PPM	12.0/ 1/ 3.0	.4/ 1/ .1	4.7/ 1/ 1.2	.2/ 1/ .1
OX BCKGRD METER/RANGE/PPM	.5/ 1/ .1	.4/ 1/ .1	.3/ 1/ .1	.2/ 1/ .1
ILUTION FACTOR	19.57	31.13	22.37	31.79
HC CONCENTRATION PPM	5.	0.	1.	1.
O CONCENTRATION PPM	35.	8.	14.	7.
O2 CONCENTRATION PCT	.5581	.3338	.4841	.3259
OX CONCENTRATION PPM	2.9	.0	1.1	.0
HC MASS GRAMS	.746	.121	.156	.141
O MASS GRAMS	5.355	2.136	2.084	1.902
O2 MASS GRAMS	1339.7	1378.1	1162.6	1352.1
OX MASS GRAMS	.689	.001	.264	.001
HC GRAMS/MI	.207	.031	.043	.036
O GRAMS/MI	1.490	.553	.580	.492
O2 GRAMS/MI	372.8	356.9	323.5	349.9
OX GRAMS/MI	.192	.000	.073	.000
UEL ECONOMY IN MPG	12.665 12.980	13.29	14.654 14.063	13.56
UN TIME SECONDS	505.	867.	505.	868.
EASURED DISTANCE MI	3.59 7.46	3.86	3.59 7.46	3.86
CF, DRY	.971 .974	.975	.973 .974	.975
DFC, WET (DRY)	.961(.944)		.964(.946)	
TOT VOL (SCM) / SAM BLR (SCM)	356.6/ .00		357.8/ .00	

SITE RESULTS

EST NUMBER		J2HC/OEM-1
AROMETER	MM HG	734.8
UMIDITY	G/KG	9.1
EMPERATURE	DEG C	21.1

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	351.0	(349.0)
FUEL ECONOMY	MPG	13.496	(13.58)
HYDROCARBONS (THC)	G/MI	.071	(.07)
CARBON MONOXIDE	G/MI	.755	(.74)
OXIDES OF NITROGEN	G/MI	.060	(.06)

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PROJECT 08-5102-001

NO. J2HC/OEM-2 RUN
CLE MODEL 89 VW JETTA
NE 1.8 L(110. CID) L-4
SMISSION A3

METER 746.25 MM HG(29.38 IN HG)
TIVE HUMIDITY 32. PCT

VEHICLE NO.M100
DATE 11/ 4/92
BAG CART NO. 2 / CVS NO. 8
DYNO NO. 2

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
M85 EM-1179-F
ODOMETER 30980. KM(19250. MILES)

DRY BULB TEMP. 20.6 DEG C(69.0 DEG F)
ABS. HUMIDITY 4.9 GM/KG

NOX HUMIDITY CORRECTION FACTOR .84

RESULTS

AG NUMBER	1	2	3	4
ESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
LOWER DIF P MM. H2O(IN. H2O)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)
LOWER INLET P MM. H2O(IN. H2O)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)
LOWER INLET TEMP. DEG. C(DEG. F)	41.1 (106.0)	40.0 (104.0)	38.9 (102.0)	38.9 (102.0)
LOWER REVOLUTIONS	19126.	32897.	19119.	32849.
OT FLOW STD. CC. METRES(SCF)	133.7 (4721.)	230.7 (8144.)	134.4 (4747.)	231.0 (8156.)
HC SAMPLE METER/RANGE/PPM	13.9/ 2/ 14.	8.4/ 2/ 8.	8.8/ 2/ 9.	9.1/ 2/ 9.
HC BCKGRD METER/RANGE/PPM	7.4/ 2/ 7.	8.2/ 2/ 8.	7.9/ 2/ 8.	8.6/ 2/ 9.
O SAMPLE METER/RANGE/PPM	37.6/ 12/ 37.	10.2/ 12/ 10.	18.1/ 12/ 17.	12.0/ 12/ 12.
O BCKGRD METER/RANGE/PPM	.4/ 12/ 0.	.3/ 12/ 0.	.4/ 12/ 0.	.3/ 12/ 0.
O2 SAMPLE METER/RANGE/PCT	75.9/ 14/ .5887	59.7/ 14/ .3703	71.3/ 14/ .5181	59.1/ 14/ .3637
O2 BCKGRD METER/RANGE/PCT	12.8/ 14/ .0430	12.9/ 14/ .0434	12.9/ 14/ .0434	12.9/ 14/ .0434
OX SAMPLE METER/RANGE/PPM	10.1/ 1/ 2.5	.1/ 1/ .0	4.8/ 1/ 1.2	.1/ 1/ .0
OX BCKGRD METER/RANGE/PPM	.3/ 1/ .1	.0/ 1/ .0	.2/ 1/ .1	.1/ 1/ .0
ILUTION FACTOR	20.06	32.00	22.87	32.56
HC CONCENTRATION PPM	7.	0.	1.	1.
O CONCENTRATION PPM	35.	9.	17.	11.
O2 CONCENTRATION PCT	.5478	.3283	.4765	.3216
OX CONCENTRATION PPM	2.5	.0	1.2	.0
HC MASS GRAMS	1.052	.121	.192	.202
O MASS GRAMS	5.479	2.497	2.606	2.959
O2 MASS GRAMS	1341.1	1386.2	1173.0	1360.0
OX MASS GRAMS	.530	.009	.250	.000
HC GRAMS/MI	.294	.031	.054	.053
O GRAMS/MI	1.533	.652	.728	.771
O2 GRAMS/MI	375.2	361.8	327.6	354.2
OX GRAMS/MI	.148	.002	.070	.000
UEL ECONOMY IN MPG	12.578 12.843	13.10	14.460 13.877	13.37
UN TIME SECONDS	504.	868.	505.	868.
EASURED DISTANCE MI	3.57 7.41	3.83	3.58 7.42	3.84
CF, DRY	.979 .982	.983	.980 .982	.983
DFC, WET (DRY)	.962(.952)		.965(.954)	
TOT VOL (SCM) / SAM BLR (SCM)	364.4/ .00		365.4/ .00	

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	355.2	(352.9)
FUEL ECONOMY	MPG	13.331	(13.41)
HYDROCARBONS (THC)	G/MI	.092	(.10)
CARBON MONOXIDE	G/MI	.856	(.89)
OXIDES OF NITROGEN	G/MI	.051	(.05)

SITE RESULTS

EST NUMBER		J2HC/OEM-2
AROMETER	MM HG	746.3
UMIDITY	G/KG	4.9
EMPERATURE	DEG C	20.6

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PROJECT 08-5102-001

ST NO. J2HC/DC-1 RUN
HICLE MODEL 89 VW JETTA
GINE 1.8 L(110. CID) L-4
ANSMISSION A3

VEHICLE NO.M100
DATE 11/ 5/92
BAG CART NO. 2 / CVS NO. 8
DYNO NO. 2

TEST WEIGHT 1247. KG(2750. LBS)
ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
M85 EM-1179-F
ODOMETER 31051. KM(19294. MILES)

ROMETER 746.76 MM HG(29.40 IN HG)
LATIVE HUMIDITY 20. PCT
G RESULTS

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 3.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR .81

	1 COLD TRANSIENT	2 STABILIZED	3 HOT TRANSIENT	4 STABILIZED
BAG NUMBER				
DESCRIPTION				
BLOWER DIF P MM. H2O(IN. H2O)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)
BLOWER INLET P MM. H2O(IN. H2O)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	42.8 (109.0)	41.7 (107.0)	40.0 (104.0)	38.9 (102.0)
BLOWER REVOLUTIONS	19142.	32878.	19129.	32844.
TOT FLOW STD. CU. METRES(SCF)	133.3 (4708.)	229.7 (8109.)	134.2 (4739.)	231.1 (8161.)
THC SAMPLE METER/RANGE/PPM	8.8/ 2/ 9.	8.2/ 2/ 8.	7.6/ 2/ 8.	8.0/ 2/ 8.
THC BCKGRD METER/RANGE/PPM	8.3/ 2/ 8.	7.9/ 2/ 8.	7.2/ 2/ 7.	7.8/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	12.1/ 12/ 12.	6.0/ 12/ 6.	8.3/ 12/ 8.	6.9/ 12/ 7.
CO BCKGRD METER/RANGE/PPM	1.3/ 12/ 1.	1.3/ 12/ 1.	1.0/ 12/ 1.	1.3/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	76.2/ 14/ .5936	59.9/ 14/ .3725	71.7/ 14/ .5239	59.4/ 14/ .3670
CO2 BCKGRD METER/RANGE/PCT	14.1/ 14/ .0482	13.8/ 14/ .0470	13.5/ 14/ .0458	13.5/ 14/ .0458
NOX SAMPLE METER/RANGE/PPM	12.2/ 1/ 3.1	.8/ 1/ .2	5.5/ 1/ 1.4	.9/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	.9/ 1/ .2	.6/ 1/ .2	1.0/ 1/ .3	.9/ 1/ .2
DILUTION FACTOR	19.99	31.85	22.66	32.32
THC CONCENTRATION PPM	1.	1.	1.	0.
CO CONCENTRATION PPM	10.	4.	7.	5.
CO2 CONCENTRATION PCT	.5478	.3270	.4801	.3226
NOX CONCENTRATION PPM	2.8	.1	1.1	.0
THC MASS GRAMS	.140	.144	.110	.117
CO MASS GRAMS	1.580	1.188	1.074	1.425
CO2 MASS GRAMS	1337.2	1375.1	1179.8	1365.2
NOX MASS GRAMS	.587	.019	.237	.002
THC GRAMS/MI	.039	.037	.031	.030
CO GRAMS/MI	.441	.308	.298	.368
CO2 GRAMS/MI	373.3	356.4	327.1	352.5
NOX GRAMS/MI	.164	.005	.066	.001
FUEL ECONOMY IN MPG	12.711 13.021	13.32	14.515 13.952	13.46
RUN TIME SECONDS	505.	868.	505.	868.
MEASURED DISTANCE MI	3.58 7.44	3.86	3.61 7.48	3.87
SCF, DRY	.983 .986	.987	.984 .986	.987
DFC, WET (DRY)	.962(.956)		.964(.958)	
TOT VOL (SCM) / SAM BLR (SCM)	363.0/ .00		365.4/ .00	

OSITE RESULTS

TEST NUMBER		J2HC/DC-1
BAROMETER	MM HG	746.8
HUMIDITY	G/KG	3.5
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	351.8	(350.7)
FUEL ECONOMY	MPG	13.493	(13.54)
HYDROCARBONS (THC)	G/MI	.036	(.03)
CARBON MONOXIDE	G/MI	.333	(.35)
OXIDES OF NITROGEN	G/MI	.055	(.05)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-5102-001

T NO. J2HC/DC-2 RUN	VEHICLE NO.M100	TEST WEIGHT 1247. KG(2750. LBS)
ICLE MODEL 89 VW JETTA	DATE 11/ 6/92	ACTUAL ROAD LOAD 5.2 KW(7.0 HP)
INE 1.8 L(110. CID) L-4	BAG CART NO. 2 / CVS NO. 8	M85 EM-1179-F
ISMISSION A3	DYNO NO. 2	ODOMETER 31075. KM(19309. MILES)
OMETER 748.54 MM HG(29.47 IN HG)	DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)	
ATIVE HUMIDITY 22. PCT	ABS. HUMIDITY 3.7 GM/KG	NOX HUMIDITY CORRECTION FACTOR .81

RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)	1295.4 (51.0)
BLOWER INLET P MM. H2O(IN. H2O)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)	965.2 (38.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	42.8 (109.0)	41.7 (107.0)	42.2 (108.0)	38.9 (102.0)
BLOWER REVOLUTIONS	19155.	32871.	19124.	32835.
TOT FLOW STD. CU. METRES(SCF)	133.8 (4724.)	230.3 (8130.)	133.7 (4723.)	231.7 (8182.)
THC SAMPLE METER/RANGE/PPM	8.2/ 2/ 8.	7.2/ 2/ 7.	7.2/ 2/ 7.	8.1/ 2/ 8.
THC BCKGRD METER/RANGE/PPM	6.8/ 2/ 7.	7.2/ 2/ 7.	6.9/ 2/ 7.	7.9/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	12.9/ 12/ 12.	6.7/ 12/ 6.	7.7/ 12/ 7.	6.8/ 12/ 6.
CO BCKGRD METER/RANGE/PPM	.4/ 12/ 0.	.4/ 12/ 0.	.6/ 12/ 1.	.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	76.1/ 14/ .5919	59.7/ 14/ .3703	71.8/ 14/ .5254	59.2/ 14/ .3648
CO2 BCKGRD METER/RANGE/PCT	13.3/ 14/ .0450	12.9/ 14/ .0434	12.7/ 14/ .0426	12.8/ 14/ .0430
NOX SAMPLE METER/RANGE/PPM	12.3/ 1/ 3.1	.5/ 1/ .1	4.8/ 1/ 1.2	.5/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.7/ 1/ .2	.5/ 1/ .1	.4/ 1/ .1	.5/ 1/ .1
DILUTION FACTOR	20.05	32.04	22.60	32.52
THC CONCENTRATION PPM	2.	0.	1.	0.
CO CONCENTRATION PPM	12.	6.	7.	6.
CO2 CONCENTRATION PCT	.5492	.3283	.4846	.3231
NOX CONCENTRATION PPM	2.9	.0	1.1	.0
THC MASS GRAMS	.267	.059	.093	.118
CO MASS GRAMS	1.828	1.588	1.037	1.575
CO2 MASS GRAMS	1345.3	1383.8	1186.7	1370.5
NOX MASS GRAMS	.607	.001	.230	.001
THC GRAMS/MI	.075	.015	.026	.031
CO GRAMS/MI	.513	.414	.289	.409
CO2 GRAMS/MI	377.1	360.4	330.6	355.7
NOX GRAMS/MI	.170	.000	.064	.000
FUEL ECONOMY IN MPG	12.578	12.878 13.17	14.359	13.813 13.34
RUN TIME SECONDS	505.	868.	505.	868.
MEASURED DISTANCE MI	3.57	7.41 3.84	3.59	7.44 3.85
SCF, DRY	.983	.985 .986	.984	.986 .987
DFC, WET (DRY)		.962(.955)		.964(.958)
TOT VOL (SCM) / SAM BLR (SCM)		364.1/ .00		365.5/ .00

OSITE RESULTS

TEST NUMBER		J2HC/DC-2
BAROMETER	MM HG	748.5
HUMIDITY	G/KG	3.7
TEMPERATURE	DEG C	22.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	355.7	(354.3)
FUEL ECONOMY	MPG	13.344	(13.39)
HYDROCARBONS (THC)	G/MI	.031	(.04)
CARBON MONOXIDE	G/MI	.400	(.40)
OXIDES OF NITROGEN	G/MI	.053	(.05)

APPENDIX 0

SUMMARIES OF TASK 3 ALDEHYDE/KETONE EMISSIONS

TABLE O-1. SUMMARY OF TOYOTA CAMRY TASK 3 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)
5/01/91	TDC0K-01	M85	Degussa	FTP	7.7	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
5/01/91	TDC0K-01	M85	Degussa	HFET	0.6	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
5/01/91	TDC0K-01	M85	Degussa	NYCC	1.4	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0
5/02/91	TDC0K-02	M85	Degussa	FTP	5.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/02/91	TDC0K-02	M85	Degussa	HFET	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/02/91	TDC0K-02	M85	Degussa	NYCC	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/10/91	TDC2K-01	M85	Degussa	FTP	4.6	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0
5/10/91	TDC2K-01	M85	Degussa	HFET	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/10/91	TDC2K-01	M85	Degussa	NYCC	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/11/91	TDC2K-02	M85	Degussa	FTP	4.8	0.2	0.0	0.0	0.0	0.0	0.2	0.5	0.0
5/11/91	TDC2K-02	M85	Degussa	HFET	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/11/91	TDC2K-02	M85	Degussa	NYCC	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/20/91	TDC4K-01	M85	Degussa	FTP	4.6	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
5/20/91	TDC4K-01	M85	Degussa	HFET	0.5	0.2	0.0	0.5	0.0	0.0	0.3	0.0	0.0
5/20/91	TDC4K-01	M85	Degussa	NYCC	2.7	0.1	0.0	2.1	0.0	0.0	1.4	0.0	0.0
5/21/91	TDC4K-02	M85	Degussa	FTP	5.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/21/91	TDC4K-02	M85	Degussa	HFET	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/21/91	TDC4K-02	M85	Degussa	NYCC	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/08/91	TDC4K-1R	M85	Degussa	FTP	5.8	0.3	0.0	0.5	0.0	0.0	0.0	0.2	0.0
10/08/91	TDC4K-1R	M85	Degussa	HFET	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
10/08/91	TDC4K-1R	M85	Degussa	NYCC	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
10/09/91	TDC4K-2R	M85	Degussa	FTP	5.4	0.2	0.0	0.2	0.0	0.0	0.0	0.1	0.0
10/09/91	TDC4K-2R	M85	Degussa	HFET	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
10/09/91	TDC4K-2R	M85	Degussa	NYCC	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0

TABLE O-2. SUMMARY OF CHEVROLET CORSICA TASK 3 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)
10/29/91	C1HC0K-01	Howell EEE	Camet	FTP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/29/91	C1HC0K-01	Howell EEE	Camet	HFET	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
10/29/91	C1HC0K-01	Howell EEE	Camet	NYCC	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
11/08/91	C1HC0K-02	Howell EEE	Camet	FTP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/08/91	C1HC0K-02	Howell EEE	Camet	HFET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/08/91	C1HC0K-02	Howell EEE	Camet	NYCC	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
11/11/91	C2HC0K-02	M85	Camet	FTP	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
11/11/91	C2HC0K-02	M85	Camet	HFET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/11/91	C2HC0K-02	M85	Camet	NYCC	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0
11/12/91	C2HC0K-02	M85	Camet	FTP	0.9	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
11/12/91	C2HC0K-02	M85	Camet	HFET	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/12/91	C2HC0K-02	M85	Camet	NYCC	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0
01/09/92	C2HC2K-01	M85	Camet	FTP	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
01/09/92	C2HC2K-01	M85	Camet	HFET	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/09/92	C1HC2K-01	M85	Camet	NYCC	<0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/10/92	C1HC2K-02	M85	Camet	FTP	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/10/92	C2HC2K-02	M85	Camet	HFET	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01/10/92	C2HC2K-02	M85	Camet	NYCC	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
02/25/92	C2HC4K-01	M85	Camet	FTP	1.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
02/25/92	C2HC4K-01	M85	Camet	HFET	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02/25/92	C2HC4K-01	M85	Camet	NYCC	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0
02/26/92	C2HC4K-02	M85	Camet	FTP	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
02/26/92	C2HC4K-02	M85	Camet	HFET	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
02/26/92	C2HC4K-02	M85	Camet	NYCC	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0

TABLE O-3. SUMMARY OF CROWN VICTORIA #1 TASK 3 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)
11/10/92	F2HC0K-01	M85	CAMET	FTP	8.1	0.5	0.0	2.3	0.0	0.0	0.6	0.0	0.0
11/10/92	F2HC0K-01	M85	CAMET	HFET	0.1	0.1	0.0	0.9	0.0	0.0	0.2	0.0	0.0
11/10/92	F2HC0K-01	M85	CAMET	NYCC	3.5	1.8	0.0	8.1	0.0	0.0	1.8	0.0	0.0
11/11/92	F2HC0K-02	M85	CAMET	FTP	6.2	0.0	0.0	1.4	0.0	0.0	0.2	0.0	0.0
11/11/92	FFHC0K-02	M85	CAMET	HFET	0.8	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.0
11/11/92	F2HC0K-02	M85	CAMET	NYCC	0.0	0.6	0.0	8.0	0.0	0.0	1.0	0.0	0.0
11/12/92	F1HC0K-01	HOWELL EEE	CAMET	FTP	0.8	0.2	0.0	0.5	0.0	0.0	0.1	0.2	0.1
11/12/92	F1HC0K-01	HOWELL EEE	CAMET	HFET	0.2	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
11/12/92	F1HC9K-01	HOWELL EEE	CAMET	NYCC	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
11/13/92	F1HC0K-02	HOWELL EEE	CAMET	FTP	0.5	0.2	0.0	1.3	0.0	0.0	0.1	0.1	0.0
11/13/92	F1HC0K-02	HOWELL EEE	CAMET	HFET	0.1	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0
11/13/92	F1HC0K-02	HOWELL EEE	CAMET	NYCC	0.0	0.0	0.0	5.0	0.0	0.0	0.3	0.0	0.0
2/9/93	F2HC2K-01	M85	CAMET	FTP	5.9	0.1	0.0	0.8	0.0	0.0	0.1	0.0	0.0
2/9/93	F2HC2K-01	M85	CAMET	HFET	0.6	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2/9/93	F2HC2K-01	M85	CAME	NYCC	1.8	0.0	0.0	2.0	0.0	0.0	0.4	0.0	0.0
2/10/93	F2HC2K-02	M85	CAMET	FTP	4.1	0.1	0.0	1.0	0.1	0.0	0.2	0.0	0.0
2/10/93	F2HC2K-02	M85	CAMET	HFET	0.4	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
2/19/93	F2HC2K-02	M85	CAMET	HYCC	1.4	0.3	0.0	4.0	0.0	0.0	1.0	0.0	0.0
5/07/93	F2HC4K-01	M85	CAMET	FTP	5.6	0.1	0.1	0.9	0.0	0.0	0.3	0.0	0.0
5/07/93	F2HC4K-01	M85	CAMET	HFET	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/07/93	F2HC4K-01	M85	CAMET	NYCC	2.1	0.1	0.0	0.4	0.0	0.0	0.3	0.0	0.0
5/11/93	F2HC3K-02	M85	CAMET	FTP	3.3	0.0	0.0	1.4	0.0	0.0	0.4	0.0	0.0
5/11/93	F2HC3K-02	M85	CAMET	HFET	0.4	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.0
5/11/93	F2HC3K-02	M85	CAMET	NYCC	2.9	0.3	0.0	7.1	0.0	0.0	2.3	0.0	0.0

TABLE O-4. SUMMARY OF FORD CROWN VICTORIA #2 TASK 3 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)
11/10/92	V2DC0K-01	M85	DEGUSSA	FTP	5.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
11/10/92	V2DC0K-01	M85	DEGUSSA	HFET	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
11/10/92	V2DC0K-01	M85	DEGUSSA	NYCC	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0
11/11/92	V2DC0K-02	M85	DEGUSSA	FTP	3.9	0.1	0.0	1.3	0.0	0.0	0.2	0.1	0.2
11/11/92	V2DC0K-02	M85	DEGUSSA	HFET	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0
11/11/92	V2DC0K-02	M85	DEGUSSA	NYCC	0.0	0.3	0.0	4.8	0.0	0.0	0.5	0.0	0.0
11/12/92	V1DC0K-01	HOWELL EEE	DEGUSSA	FTP	0.3	0.3	0.1	1.0	0.0	0.0	0.2	0.1	0.0
11/12/92	V1DC0K-01	HOWELL EEE	DEGUSSA	HFET	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
11/12/92	V1DC0K-01	HOWELL EEE	DEGUSSA	NYCC	0.6	0.6	0.0	2.1	0.0	0.0	0.4	0.0	1.1
11/13/92	V2DC0K-02	HOWELL EEE	DEGUSSA	FTP	0.4	0.4	0.0	1.6	0.0	0.0	0.2	0.2	0.1
11/13/92	V1DC0K-02	HOWELL EEE	DEGUSSA	HFET	0.0	0.1	0.0	0.6	0.0	0.0	0.1	0.5	0.0
11/13/92	V1DC0K-02	HOWELL EEE	DEGUSSA	NYCC	0.0	0.2	0.0	6.5	0.0	0.0	2.9	0.0	0.0
2/09/92	V2DC2K-01	M85	DEGUSSA	FTP	5.8	0.1	0.0	0.7	0.0	0.0	0.0	0.1	0.0
2/09/93	V2DC2K-01	M85	DEGUSSA	HFET	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
2/09/93	V2DC2K-01	M85	DEGUSSA	NYCC	0.3	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
2/10/92	V2DC2K-02	M85	DEGUSSA	FTP	4.6	0.1	0.0	0.7	0.0	0.0	0.2	0.0	0.0
2/10/92	V2DC2K-02	M85	DEGUSSA	HFET	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0
2/10/92	V2DC2K-02	M85	DEGUSSA	NYCC	0.0	0.0	0.0	3.6	0.0	0.0	1.4	0.0	0.0
3/01/93	V2DC4K-01	M85	DEGUSSA	FTP	7.2	0.1	0.0	0.6	0.0	0.0	0.2	0.2	0.0
3/01/93	V2DC4K-01	M85	DEGUSSA	HFET	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
3/01/93	V2DC4K-01	M85	DEGUSSA	NYCC	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
3/02/93	V2DC4K-02	M85	DEGUSSA	FTP	7.8	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.0
3/02/93	V2DC4K-02	M85	DEGUSSA	HFET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/02/93	V2DC4K-02	M85	DEGUSS	NYCC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE O-5. SUMMARY OF VW JETTA TASK 3 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)
11/10/92	J2HC0K-01	M85	CAMET+DEG	FTP	0.0	0.2	0.0	2.5	0.0	0.0	0.2	0.0	0.0
11/10/92	J2HC0K-01	M85	CAMET+DEG	HFET	0.0	0.1	0.0	0.7	0.0	0.0	0.1	0.0	0.0
11/10/92	J2HC0K-01	M85	CAMET+DEG	NYCC	0.0	1.5	0.0	7.4	0.0	0.0	0.1	0.0	0.0
11/11/92	J2HC0K-02	M85	CAMET+DEG	FTP	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0
11/11/92	J2HC0K-02	M85	CAMET+DEG	HFET	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
11/11/92	J2HC0K-02	M85	CAMET+DEG	NYCC	0.0	0.2	0.0	3.1	0.0	0.0	0.8	0.0	0.0
11/13/92	J1HC0K-02	HOWELL EEE	CAMET+DEG	FTP	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.0
11/13/92	J1HC0K-02	HOWELL EEE	CAMET+DEG	HFET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/13/92	J1HC0K-02	HOWELL EEE	CAMET+DEG	NYCC	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
11/17/92	J1HC0K-03	HOWELL EEE	CAMET+DEG	FTP	0.3	0.1	0.0	0.9	0.0	0.0	0.3	0.2	0.0
11/17/92	J1HC0K-03	HOWELL EEE	CAMET+DEG	HFET	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
11/17/92	J1HC0K-03	HOWELL EEE	CAMET+DEG	NYCC	0.0	0.2	0.0	3.3	0.0	0.0	0.1	0.0	0.0
4/16/93	J2HC2K-01	M85	CAMET+DEG	FTP	0.2	0.1	0.0	0.4	0.0	0.0	0.0	0.1	0.0
4/16/93	J2HC2K-01	M85	CAMET+DEG	HFET	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
4/16/93	H2HC2K-01	M85	CAMET+DEG	NYCC	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/19/93	J2HC2K-02	M85	CAMET+DEG	FTP	0.2	0.1	0.0	0.8	0.0	0.0	0.1	0.0	0.0
4/19/93	J2HC2K-02	M85	CAMET+DEG	HFET	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
4/19/93	J2HC2K-02	M85	CAMET+DEG	NYCC	0.0	0.1	0.0	4.9	0.0	0.0	0.1	0.0	0.0
5/7/93	J2HC4K-01	M85	CAMET+DEG	FTP	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
5/7/93	J2HC4K-01	M85	CAMET+DET	HFET	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0
5/7/93	J2HC4K-01	M85	CAMET+DEG	NYCC	0.0	0.0	0.0	2.6	0.0	0.0	0.5	0.0	0.0
5/10/93	J2HC4K-02	M85	CAMET+DEG	FTP	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/10/93	J2HC4K-02	M85	CAMET+DEG	HFET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/10/93	J2HC4K-02	M85	CAMET+DEG	NYCC	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX P

COMPUTER PRINTOUTS OF TOYOTA CAMRY TASK 3 EMISSION TESTS

Page P-	Test No.	Durability Mileage, mi	Catalyst	Test Cycle
2	TDC0K-01	0	Degussa	FTP
3	TDC0K-01	0	Degussa	HFET
4	TDC0K-01	0	Degussa	NYCC
5	TDC0K-02	0	Degussa	FTP
6	TDC0K-02	0	Degussa	HFET
7	TDC0K-02	0	Degussa	NYCC
8	TDC2K-01	2000	Degussa	FTP
9	TDC2K-01	2000	Degussa	HFET
10	TDC2K-01	2000	Degussa	NYCC
11	TDC2K-02	2000	Degussa	FTP
12	TDC2K-02	2000	Degussa	HFET
13	TDC2K-02	2000	Degussa	NYCC
14	TDC4K-01	4000	Degussa	FTP
15	TDC4K-01	4000	Degussa	HFET
16	TDC4K-01	4000	Degussa	NYCC
17	TDC4K-02	4000	Degussa	FTP
18	TDC4K-02	4000	Degussa	HFET
19	TDC4K-02	4000	Degussa	NYCC
20	TDC4K-1R	4000	Degussa	FTP
21	TDC4K-1R	4000	Degussa	HFET
22	TDC4K-1R	4000	Degussa	NYCC
23	TDC4K-2R	4000	Degussa	FTP
24	TDC4K-2R	4000	Degussa	HFET
25	TDC4K-2R	4000	Degussa	NYCC

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TEST NO. TDC0K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/ 1/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 37298. KM(23176. MILES)

BAROMETER 739.39 MM HG(29.11 IN HG)
RELATIVE HUMIDITY 57. PCT

DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 9.4 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)	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)	40.6 (105.0)	37.8 (100.0)	40.6 (105.0)	38.9 (102.0)
BLOWER REVOLUTIONS	40065.	68726.	39898.	68609.
TOT FLOW STD. CU. METRES(SCF)	72.3 (2552.)	125.1 (4418.)	72.0 (2541.)	124.4 (4394.)
THC SAMPLE METER/RANGE/PPM	58.8/ 2/ 59.	11.6/ 2/ 12.	9.7/ 2/ 10.	9.5/ 2/ 9.
THC BCKGRD METER/RANGE/PPM	11.6/ 2/ 12.	12.1/ 2/ 12.	9.8/ 2/ 10.	9.7/ 2/ 10.
CO SAMPLE METER/RANGE/PPM	98.4/ 13/ 244.	1.0/ 12/ 1.	1.1/ 12/ 1.	1.0/ 12/ 1.
CO BCKGRD METER/RANGE/PPM	.2/ 13/ 0.	.4/ 12/ 0.	.5/ 12/ 1.	1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	89.5/ 14/ .8551	72.6/ 14/ .5372	84.8/ 14/ .7514	72.2/ 14/ .5313
CO2 BCKGRD METER/RANGE/PCT	14.0/ 14/ .0478	14.2/ 14/ .0486	13.6/ 14/ .0462	13.8/ 14/ .0470
NOX SAMPLE METER/RANGE/PPM	57.1/ 1/ 14.3	22.6/ 1/ 5.7	34.4/ 1/ 8.7	21.5/ 1/ 5.5
NOX BCKGRD METER/RANGE/PPM	1.3/ 1/ .3	1.9/ 1/ .5	1.1/ 1/ .3	.8/ 1/ .2
DILUTION FACTOR	13.47	22.12	15.83	22.38
THC CONCENTRATION PPM	48.	0.	1.	0.
CO CONCENTRATION PPM	233.	1.	1.	0.
CO2 CONCENTRATION PCT	.8109	.4908	.7081	.4864
NOX CONCENTRATION PPM	14.0	5.3	8.4	5.3
THC MASS GRAMS	3.98	.01	.04	.03
CO MASS GRAMS	19.63	.09	.05	.00
CO2 MASS GRAMS	1073.1	1124.4	933.0	1108.1
NOX MASS GRAMS	1.85	1.21	1.11	1.20
THC GRAMS/MI	1.10	.00	.01	.01
CO GRAMS/MI	5.45	.02	.01	.00
CO2 GRAMS/MI	298.0	290.7	259.0	285.2
NOX GRAMS/MI	.51	.31	.31	.31
FUEL ECONOMY IN MPG	15.42 15.89	16.36	18.35 17.44	16.67
RUN TIME SECONDS	504.	868.	504.	868.
MEASURED DISTANCE MI	3.60 7.47	3.87	3.60 7.49	3.89
SCF, DRY	.967 .970	.972	.969 .971	.972
DFC, WET (DRY)	.944(.927)		.949(.931)	
TOT VOL (SCM) / SAM BLR (SCM)	197.4/ .00		196.4/ .00	

COMPOSITE RESULTS

TEST NUMBER		TDC0K-01
BAROMETER	MM HG	739.4
HUMIDITY	G/KG	9.4
TEMPERATURE	DEG C	21.7

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	283.5	(281.9)
FUEL ECONOMY	MPG	16.65	(16.74)
HYDROCARBONS (THC)	G/MI	.23	(.24)
CARBON MONOXIDE	G/MI	1.15	(1.14)
OXIDES OF NITROGEN	G/MI	.35	(.35)

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TEST NO. TDCOK-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 739.90 MM HG(29.13 IN HG)
RELATIVE HUMIDITY 50. PCT
BAG RESULTS

VEHICLE NO.311
DATE 5/ 1/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 8.5 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 37322. KM(23191. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .93

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)		43.3 (110.0)
BLOWER REVOLUTIONS		60598.
TOT FLOW STD. CU. METRES(SCF)		108.4 (3827.)
THC SAMPLE METER/RANGE/PPM		10.0/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		9.4/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		.6/ 12/ 1.
CO BCKGRD METER/RANGE/PPM		.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		94.3/ 14/ .9781
CO2 BCKGRD METER/RANGE/PCT		13.4/ 14/ .0454
NOX SAMPLE METER/RANGE/PPM		22.8/ 1/ 5.8
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		12.16
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		0.
CO2 CONCENTRATION PCT		.9364
NOX CONCENTRATION PPM		5.7
THC MASS GRAMS		.17
CO MASS GRAMS		.03
CO2 MASS GRAMS		1858.0
NOX MASS GRAMS		1.10
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.918 (.903)
SCF, WET (DRY)		1.000 (.967)
VOL (SCM)		108.4
SAM BLR (SCM)		.00
MI (MEASURED)		10.19
TEST NUMBER,		TDCOK-01
BAROMETER,	MM HG	739.9
HUMIDITY,	G/KG	8.5
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	182.2
FUEL ECONOMY,	MPG	26.1
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.00
OXIDES OF NITROGEN,	G/MI	.11

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EST NO. TDCOK-01 RUN	VEHICLE NO.311	TEST WEIGHT 1361. KG(3000. LBS)
EHICLE MODEL 86 TOYOTA CAMRY	DATE 5/ 1/91	ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
NGINE 2.0 L(122. CID) L-4	BAG CART NO. 2	M85 EM-1179-F
RANSMISSION A3	DYNO NO. 3	ODOMETER 37338. KM(23201. MILES)
	CVS NO. 2	C = .436 H = .128 O = .437
AROMETER 739.65 MM HG(29.12 IN HG)	DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)	FUEL DENSITY = 6.57
ELATIVE HUMIDITY 50. PCT	ABS. HUMIDITY 8.5 GM/KG	NOX HUMIDITY CORRECTION FACTOR .93

AG 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)	38.9 (102.0)
BLOWER REVOLUTIONS	47486.
TOT FLOW STD. CU. METRES(SCF)	86.2 (3043.)
THC SAMPLE METER/RANGE/PPM	10.0/ 2/ 10.
THC BCKGRD METER/RANGE/PPM	10.0/ 2/ 10.
CO SAMPLE METER/RANGE/PPM	.5/ 12/ 1.
CO BCKGRD METER/RANGE/PPM	.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	62.8/ 14/ .4061
CO2 BCKGRD METER/RANGE/PCT	13.1/ 14/ .0442
NOX SAMPLE METER/RANGE/PPM	16.3/ 1/ 4.2
NOX BCKGRD METER/RANGE/PPM	.5/ 1/ .1
DILUTION FACTOR	29.26
THC CONCENTRATION PPM	0.
CO CONCENTRATION PPM	0.
CO2 CONCENTRATION PCT	.3634
NOX CONCENTRATION PPM	4.1
THC MASS GRAMS	.03
CO MASS GRAMS	.01
CO2 MASS GRAMS	573.3
NOX MASS GRAMS	.62
RUN TIME SECONDS	599.
DFC, WET (DRY)	.966 (.950)
SCF, WET (DRY)	1.000 (.977)
VOL (SCM)	86.2
SAM BLR (SCM)	.00
MI (MEASURED)	1.13

TEST NUMBER,		TDCOK-01
BAROMETER,	MM HG	739.6
HUMIDITY,	G/KG	8.5
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	505.9
FUEL ECONOMY,	MPG	9.4
HYDROCARBONS, (THC)	G/MI	.03
CARBON MONOXIDE,	G/MI	.01
OXIDES OF NITROGEN,	G/MI	.55

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TEST NO. TDCOK-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/ 2/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 37356. KM(23212. MILES)

BAROMETER 737.36 MM HG(29.03 IN HG)
RELATIVE HUMIDITY 69. PCT

DRY BULB TEMP. 22.8 DEG C(73.0 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)	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)	40.6 (105.0)	38.3 (101.0)	40.6 (105.0)	39.4 (103.0)
BLOWER REVOLUTIONS	40194.	68890.	40036.	68780.
TOT FLOW STD. CU. METRES(SCF)	72.3 (2553.)	124.8 (4407.)	72.0 (2542.)	124.1 (4383.)
THC SAMPLE METER/RANGE/PPM	50.8/ 2/ 51.	12.0/ 2/ 12.	12.1/ 2/ 12.	11.8/ 2/ 12.
THC BCKGRD METER/RANGE/PPM	12.6/ 2/ 13.	12.7/ 2/ 13.	12.6/ 2/ 13.	12.1/ 2/ 12.
CO SAMPLE METER/RANGE/PPM	56.4/ 14/ 255.	.5/ 12/ 1.	1.2/ 12/ 1.	.8/ 12/ 1.
CO BCKGRD METER/RANGE/PPM	.5/ 14/ 2.	.5/ 12/ 1.	.9/ 12/ 1.	.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	88.5/ 14/ .8318	72.2/ 14/ .5313	84.2/ 14/ .7391	71.7/ 14/ .5239
CO2 BCKGRD METER/RANGE/PCT	12.9/ 14/ .0434	12.9/ 14/ .0434	13.6/ 14/ .0462	13.9/ 14/ .0474
NOX SAMPLE METER/RANGE/PPM	48.6/ 1/ 12.2	21.5/ 1/ 5.5	22.3/ 1/ 5.7	19.1/ 1/ 4.9
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	1.9/ 1/ .5	.8/ 1/ .2	.4/ 1/ .1
DILUTION FACTOR	13.83	22.37	16.09	22.68
THC CONCENTRATION PPM	39.	0.	0.	0.
CO CONCENTRATION PPM	242.	0.	0.	0.
CO2 CONCENTRATION PCT	.7916	.4898	.6958	.4786
NOX CONCENTRATION PPM	11.9	5.0	5.5	4.8
THC MASS GRAMS	3.24	.00	.02	.03
CO MASS GRAMS	20.35	.00	.03	.00
CO2 MASS GRAMS	1047.7	1119.2	917.1	1087.7
NOX MASS GRAMS	1.74	1.27	.80	1.20
THC GRAMS/MI	.90	.00	.01	.01
CO GRAMS/MI	5.63	.00	.01	.00
CO2 GRAMS/MI	290.1	288.9	254.4	280.3
NOX GRAMS/MI	.48	.33	.22	.31
FUEL ECONOMY IN MPG	15.83	16.15 16.46	18.69	17.75 16.96
RUN TIME SECONDS	505.	868.	505.	867.
MEASURED DISTANCE MI	3.61	7.49 3.87	3.61	7.49 3.88
SCF, DRY	.963	.966 .968	.965	.967 .968
DFC, WET (DRY)		.945(.924)		.949(.928)
TOT VOL (SCM) / SAM BLR (SCM)		197.1/ .00		196.1/ .00

COMPOSITE RESULTS

TEST NUMBER		TDCOK-02
BAROMETER	MM HG	737.4
HUMIDITY	G/KG	12.5
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	279.7	(277.1)
FUEL ECONOMY	MPG	16.87	(17.03)
HYDROCARBONS (THC)	G/MI	.19	(.19)
CARBON MONOXIDE	G/MI	1.17	(1.17)
OXIDES OF NITROGEN	G/MI	.33	(.33)

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PROJECT 08-3381-001

TEST NO. TDC0K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 737.87 MM HG(29.05 IN HG)
RELATIVE HUMIDITY 65. PCT
BAG RESULTS

VEHICLE NO.311
DATE 5/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.3 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 37380. KM(23227. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.02

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)		43.3 (110.0)
BLOWER REVOLUTIONS		60614.
TOT FLOW STD. CU. METRES(SCF)		108.1 (3816.)
THC SAMPLE METER/RANGE/PPM		11.9/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		11.5/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		2.3/ 12/ 2.
CO BCKGRD METER/RANGE/PPM		.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		95.1/ 14/1.0006
CO2 BCKGRD METER/RANGE/PCT		13.9/ 14/ .0474
NOX SAMPLE METER/RANGE/PPM		12.5/ 1/ 3.2
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		11.89
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		2.
CO2 CONCENTRATION PCT		.9572
NOX CONCENTRATION PPM		3.2
THC MASS GRAMS		.17
CO MASS GRAMS		.21
CO2 MASS GRAMS		1893.6
NOX MASS GRAMS		.66
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.916 (.897)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		108.1
SAM BLR (SCM)		.00
MI (MEASURED)		10.23
TEST NUMBER,		TDC0K-02
BAROMETER,	MM HG	737.9
HUMIDITY,	G/KG	11.3
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	185.1
FUEL ECONOMY,	MPG	25.7
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.02
OXIDES OF NITROGEN,	G/MI	.06

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

TEST NO. TDC0K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 65. PCT

VEHICLE NO.311
DATE 5/ 2/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 37396. KM(23237. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.02

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)		41.1 (106.0)
BLOWER REVOLUTIONS		47508.
TOT FLOW STD. CU. METRES(SCF)		85.4 (3014.)
THC SAMPLE METER/RANGE/PPM		11.4/ 2/ 11.
THC BCKGRD METER/RANGE/PPM		11.5/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		1.1/ 12/ 1.
CO BCKGRD METER/RANGE/PPM		.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		63.0/ 14/ .4085
CO2 BCKGRD METER/RANGE/PCT		14.0/ 14/ .0478
NOX SAMPLE METER/RANGE/PPM		10.4/ 1/ 2.7
NOX BCKGRD METER/RANGE/PPM		.4/ 1/ .1
DILUTION FACTOR		29.07
THC CONCENTRATION PPM		0.
CO CONCENTRATION PPM		0.
CO2 CONCENTRATION PCT		.3623
NOX CONCENTRATION PPM		2.6
THC MASS GRAMS		.03
CO MASS GRAMS		.02
CO2 MASS GRAMS		566.3
NOX MASS GRAMS		.43
RUN TIME	SECONDS	600.
DFC, WET (DRY)		.966 (.945)
SCF, WET (DRY)		1.000 (.972)
VOL (SCM)		85.4
SAM BLR (SCM)		.00
MI (MEASURED)		1.16
TEST NUMBER,		TDC0K-02
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	11.2
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	489.9
FUEL ECONOMY,	MPG	9.7
HYDROCARBONS, (THC)	G/MI	.03
CARBON MONOXIDE,	G/MI	.02
OXIDES OF NITROGEN,	G/MI	.37

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

TEST NO. TDC2K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/10/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 40650. KM(25259. 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)	40.6 (105.0)	38.3 (101.0)	40.6 (105.0)	38.9 (102.0)
BLOWER REVOLUTIONS	40096.	68907.	40036.	68731.
TOT FLOW STD. CU. METRES(SCF)	72.2 (2549.)	125.0 (4414.)	72.1 (2545.)	124.4 (4393.)
THC SAMPLE METER/RANGE/PPM	63.0/ 2/ 63.	15.1/ 2/ 15.	13.7/ 2/ 14.	16.9/ 2/ 17.
THC BCKGRD METER/RANGE/PPM	20.0/ 2/ 20.	15.5/ 2/ 15.	12.5/ 2/ 12.	15.8/ 2/ 16.
CO SAMPLE METER/RANGE/PPM	63.6/ 14/ 294.	8.8/ 12/ 9.	6.7/ 12/ 7.	10.4/ 12/ 10.
CO BCKGRD METER/RANGE/PPM	.3/ 14/ 1.	.6/ 12/ 1.	.6/ 12/ 1.	.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	90.9/ 14/ .8890	73.9/ 14/ .5570	84.1/ 14/ .7371	73.1/ 14/ .5448
CO2 BCKGRD METER/RANGE/PCT	13.4/ 14/ .0454	13.4/ 14/ .0454	13.5/ 14/ .0458	13.4/ 14/ .0454
NOX SAMPLE METER/RANGE/PPM	25.2/ 1/ 6.4	1.1/ 1/ .3	1.6/ 1/ .4	.5/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	.9/ 1/ .2	1.1/ 1/ .3	.3/ 1/ .1	.4/ 1/ .1
DILUTION FACTOR	12.90	21.29	16.11	21.76
THC CONCENTRATION PPM	45.	0.	2.	2.
CO CONCENTRATION PPM	279.	8.	6.	10.
CO2 CONCENTRATION PCT	.8472	.5138	.6942	.5015
NOX CONCENTRATION PPM	6.2	.0	.3	.0
THC MASS GRAMS	3.68	.05	.16	.26
CO MASS GRAMS	23.48	1.16	.50	1.38
CO2 MASS GRAMS	1119.8	1175.7	916.0	1142.3
NOX MASS GRAMS	.88	.00	.05	.01
THC GRAMS/MI	1.01	.01	.05	.07
CO GRAMS/MI	6.45	.30	.14	.36
CO2 GRAMS/MI	307.7	300.6	254.6	295.0
NOX GRAMS/MI	.24	.00	.01	.00
FUEL ECONOMY IN MPG	14.88	15.34 15.79	18.65	17.22 16.08
RUN TIME SECONDS	504.	868.	505.	868.
MEASURED DISTANCE MI	3.64	7.55 3.91	3.60	7.47 3.87
SCF, DRY	.963	.967 .969	.966	.968 .969
DPC, WET (DRY)		.942(.922)		.948(.928)
TOT VOL (SCM) / SAM BLR (SCM)		197.2/ .00		196.5/ .00

COMPOSITE RESULTS

TEST NUMBER		TDC2K-01
BAROMETER	MM HG	738.1
HUMIDITY	G/KG	11.7
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	289.5	(287.8)
FUEL ECONOMY	MPG	16.27	(16.36)
HYDROCARBONS (THC)	G/MI	.23	(.24)
CARBON MONOXIDE	G/MI	1.53	(1.55)
OXIDES OF NITROGEN	G/MI	.05	(.05)

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

TEST NO. TDC2K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 65. PCT

VEHICLE NO.311
DATE 5/10/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.7 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 40675. KM(25274. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.03

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		60602.
TOT FLOW STD. CU. METRES(SCF)		108.5 (3831.)
THC SAMPLE METER/RANGE/PPM		18.0/ 2/ 18.
THC BCKGRD METER/RANGE/PPM		14.0/ 2/ 14.
CO SAMPLE METER/RANGE/PPM		15.2/ 12/ 15.
CO BCKGRD METER/RANGE/PPM		.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		55.6/ 1/1.0304
CO2 BCKGRD METER/RANGE/PCT		2.7/ 1/ .0473
NOX SAMPLE METER/RANGE/PPM		4.8/ 1/ 1.3
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		11.52
THC CONCENTRATION PPM		5.
CO CONCENTRATION PPM		14.
CO2 CONCENTRATION PCT		.9872
NOX CONCENTRATION PPM		1.1
THC MASS GRAMS		.65
CO MASS GRAMS		1.78
CO2 MASS GRAMS		1960.8
NOX MASS GRAMS		.24
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.913 (.894)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		108.5
SAM BLR (SCM)		.00
MI (MEASURED)		10.21
TEST NUMBER,		TDC2K-01
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	11.7
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	192.1
FUEL ECONOMY,	MPG	24.7
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.17
OXIDES OF NITROGEN,	G/MI	.02

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

TEST NO. TDC2K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 61. PCT

VEHICLE NO.311
DATE 5/10/91
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 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 40691. KM(25284. 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		47566.
TOT FLOW STD. CU. METRES(SCF)		84.8 (2995.)
THC SAMPLE METER/RANGE/PPM		13.4/ 2/ 13.
THC BCKGRD METER/RANGE/PPM		12.5/ 2/ 12.
CO SAMPLE METER/RANGE/PPM		8.3/ 12/ 8.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		63.5/ 14/ .4145
CO2 BCKGRD METER/RANGE/PCT		13.6/ 14/ .0462
NOX SAMPLE METER/RANGE/PPM		1.4/ 1/ .4
NOX BCKGRD METER/RANGE/PPM		1.0/ 1/ .3
DILUTION FACTOR		28.59
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		8.
CO2 CONCENTRATION PCT		.3699
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.13
CO MASS GRAMS		.80
CO2 MASS GRAMS		574.6
NOX MASS GRAMS		.02
RUN TIME	SECONDS	601.
DFC, WET (DRY)		.965 (.946)
SCF, WET (DRY)		1.000 (.973)
VOL (SCM)		84.8
SAM BLR (SCM)		.00
MI (MEASURED)		1.14
TEST NUMBER,		TDC2K-01
BAROMETER,	MM HG	738.1
HUMIDITY,	G/KG	11.0
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	503.6
FUEL ECONOMY,	MPG	9.4
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	.70
OXIDES OF NITROGEN,	G/MI	.02

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

TEST NO. TDC2K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/11/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
M85 EM-1179-F
ODOMETER 40692. KM(25285. MILES)

BAROMETER 740.16 MM HG(29.14 IN HG)
RELATIVE HUMIDITY 74. PCT
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 13.2 GM/KG
NOX HUMIDITY CORRECTION FACTOR 1.09

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)	41.1 (106.0)	39.4 (103.0)	41.7 (107.0)	41.1 (106.0)
BLOWER REVOLUTIONS	40140.	68972.	40064.	68687.
TOT FLOW STD. CU. METRES(SCF)	72.4 (2556.)	125.1 (4416.)	72.1 (2546.)	123.8 (4372.)
THC SAMPLE METER/RANGE/PPM	77.0/ 2/ 77.	15.3/ 2/ 15.	15.0/ 2/ 15.	13.6/ 2/ 14.
THC BCKGRD METER/RANGE/PPM	18.1/ 2/ 18.	15.8/ 2/ 16.	13.1/ 2/ 13.	12.4/ 2/ 12.
CO SAMPLE METER/RANGE/PPM	76.1/ 14/ 364.	3.6/ 12/ 4.	30.4/ 12/ 30.	7.6/ 12/ 8.
CO BCKGRD METER/RANGE/PPM	.0/ 14/ 0.	.0/ 12/ 0.	.0/ 12/ 0.	.1/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	89.4/ 14/ .8528	73.0/ 14/ .5432	83.0/ 14/ .7153	71.9/ 14/ .5268
CO2 BCKGRD METER/RANGE/PCT	12.2/ 14/ .0407	12.3/ 14/ .0411	12.5/ 14/ .0418	12.4/ 14/ .0415
NOX SAMPLE METER/RANGE/PPM	26.7/ 1/ 6.8	.5/ 1/ .1	2.2/ 1/ .6	.0/ 1/ .0
NOX BCKGRD METER/RANGE/PPM	1.0/ 1/ .3	.5/ 1/ .1	.1/ 1/ .0	.0/ 1/ .0
DILUTION FACTOR	13.31	21.85	16.55	22.52
THC CONCENTRATION PPM	60.	0.	3.	2.
CO CONCENTRATION PPM	347.	4.	29.	7.
CO2 CONCENTRATION PCT	.8152	.5041	.6759	.4872
NOX CONCENTRATION PPM	6.5	.0	.6	.0
THC MASS GRAMS	5.00	.03	.22	.25
CO MASS GRAMS	29.24	.51	2.43	1.05
CO2 MASS GRAMS	1080.2	1154.1	892.2	1104.4
NOX MASS GRAMS	.98	.00	.08	.00
THC GRAMS/MI	1.40	.01	.06	.06
CO GRAMS/MI	8.19	.13	.67	.27
CO2 GRAMS/MI	302.6	299.8	247.5	285.0
NOX GRAMS/MI	.27	.00	.02	.00
FUEL ECONOMY IN MPG	14.97 15.41	15.85	19.12 17.76	16.65
RUN TIME SECONDS	504.	867.	505.	867.
MEASURED DISTANCE MI	3.57 7.42	3.85	3.60 7.48	3.88
SCF, DRY	.961 .965	.967	.964 .966	.967
DFC, WET (DRY)	.943(.921)		.950(.927)	
TOT VOL (SCM) / SAM BLR (SCM)	197.4/ .00		195.9/ .00	

COMPOSITE RESULTS

TEST NUMBER		TDC2K-02
BAROMETER	MM HG	740.2
HUMIDITY	G/KG	13.2
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	286.0	(281.6)
FUEL ECONOMY	MPG	16.42	(16.67)
HYDROCARBONS (THC)	G/MI	.31	(.33)
CARBON MONOXIDE	G/MI	1.95	(1.99)
OXIDES OF NITROGEN	G/MI	.06	(.06)

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

TEST NO. TDC2K-02 RUN	VEHICLE NO.311	TEST WEIGHT 1361. KG(3000. LBS)
VEHICLE MODEL 86 TOYOTA CAMRY	DATE 5/11/91	ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
ENGINE 2.0 L(122. CID) L-4	BAG CART NO. 2	M85 EM-1179-F
TRANSMISSION A3	DYNO NO. 3	ODOMETER 40716. KM(25300. MILES)
	CVS NO. 2	C = .436 H = .128 O = .437
BAROMETER 740.41 MM HG(29.15 IN HG)	DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)	FUEL DENSITY = 6.57
RELATIVE HUMIDITY 69. PCT	ABS. HUMIDITY 11.9 GM/KG	NOX HUMIDITY CORRECTION FACTOR 1.04

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)		40.0 (104.0)
BLOWER REVOLUTIONS		61460.
TOT FLOW STD. CU. METRES(SCF)		111.3 (3932.)
THC SAMPLE METER/RANGE/PPM		17.8/ 2/ 18.
THC BCKGRD METER/RANGE/PPM		14.4/ 2/ 14.
CO SAMPLE METER/RANGE/PPM		9.8/ 12/ 10.
CO BCKGRD METER/RANGE/PPM		.3/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		94.0/ 14/ .9698
CO2 BCKGRD METER/RANGE/PCT		12.4/ 14/ .0415
NOX SAMPLE METER/RANGE/PPM		4.3/ 1/ 1.1
NOX BCKGRD METER/RANGE/PPM		.1/ 1/ .0
DILUTION FACTOR		12.25
THC CONCENTRATION PPM		5.
CO CONCENTRATION PPM		9.
CO2 CONCENTRATION PCT		.9317
NOX CONCENTRATION PPM		1.1
THC MASS GRAMS		.58
CO MASS GRAMS		1.18
CO2 MASS GRAMS		1899.4
NOX MASS GRAMS		.24
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.918 (.898)
DCF, WET (DRY)		1.000 (.961)
VOL (SCM)		111.3
SAM BLR (SCM)		.00
MI (MEASURED)		10.16
TEST NUMBER,		TDC2K-02
BAROMETER,	MM HG	740.4
HUMIDITY,	G/KG	11.9
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	186.9
FUEL ECONOMY,	MPG	25.4
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.12
OXIDES OF NITROGEN,	G/MI	.02

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PROJECT 08-3381-001

NO. TDC2K-02 RUN		VEHICLE NO.311	TEST WEIGHT 1361. KG(3000. LBS)
CLE MODEL 86 TOYOTA CAMRY		DATE 5/11/91	ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
NE 2.0 L(122. CID) L-4		BAG CART NO. 2	M85 EM-1179-F
MISSION A3		DYNO NO. 3	ODOMETER 40732. KM(25310. MILES)
		CVS NO. 2	C = .436 H = .128 O = .437
ETER 740.16 MM HG(29.14 IN HG)		DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)	FUEL DENSITY = 6.57
IVE HUMIDITY 69. PCT		ABS. HUMIDITY 11.9 GM/KG	NOX HUMIDITY CORRECTION FACTOR 1.04
ESULTS			
ST CYCLE		NYCC	
WER DIF P MM. H2O(IN. H2O)		1066.8 (42.0)	
WER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)	
WER INLET TEMP. DEG. C(DEG. F)		40.6 (105.0)	
WER REVOLUTIONS		47497.	
FLOW STD. CU. METRES(SCF)		85.8 (3029.)	
SAMPLE METER/RANGE/PPM		16.9/ 2/ 17.	
BCKGRD METER/RANGE/PPM		16.3/ 2/ 16.	
SAMPLE METER/RANGE/PPM		6.9/ 12/ 7.	
BCKGRD METER/RANGE/PPM		.0/ 12/ 0.	
SAMPLE METER/RANGE/PCT		63.6/ 14/ .4157	
BCKGRD METER/RANGE/PCT		12.4/ 14/ .0415	
SAMPLE METER/RANGE/PPM		.9/ 1/ .2	
BCKGRD METER/RANGE/PPM		.3/ 1/ .1	
TION FACTOR		28.49	
NCENTRATION PPM		1.	
NCENTRATION PPM		7.	
NCENTRATION PCT		.3757	
NCENTRATION PPM		.2	
ASS GRAMS		.12	
ASS GRAMS		.67	
ASS GRAMS		590.1	
ASS GRAMS		.03	
IME SECONDS		599.	
FC, WET (DRY)		.965 (.943)	
CF, WET (DRY)		1.000 (.970)	
OL (SCM)		85.8	
AM BLR (SCM)		.00	
I (MEASURED)		1.15	
MBER,		TDC2K-02	
ER, MM HG		740.2	
Y, G/KG		11.9	
ATURE, DEG C		22.2	
DIOXIDE, G/MI		511.0	
NOMY, MPG		9.3	
RBONS, (THC) G/MI		.10	
NOXIDE, G/MI		.58	
F NITROGEN, G/MI		.02	

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PROJECT 08- -001

TEST NO. TDC4K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/20/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 43983. KM(27330. MILES)

BAROMETER 738.38 MM HG(29.07 IN HG)
RELATIVE HUMIDITY 73. PCT
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 12.2 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)	38.9 (102.0)	40.6 (105.0)	41.1 (106.0)	40.6 (105.0)
BLOWER REVOLUTIONS	40153.	68896.	39977.	68742.
TOT FLOW STD. CU. METRES(SCF)	72.7 (2568.)	124.1 (4382.)	71.9 (2538.)	123.8 (4371.)
THC SAMPLE METER/RANGE/PPM	95.0/ 2/ 95.	11.0/ 2/ 11.	11.9/ 2/ 12.	10.7/ 2/ 11.
THC BCKGRD METER/RANGE/PPM	13.5/ 2/ 13.	13.5/ 2/ 13.	10.1/ 2/ 10.	9.8/ 2/ 10.
CO SAMPLE METER/RANGE/PPM	93.3/ 14/ 465.	3.7/ 12/ 4.	13.9/ 12/ 14.	8.0/ 12/ 8.
CO BCKGRD METER/RANGE/PPM	.0/ 14/ 0.	.0/ 12/ 0.	.4/ 12/ 0.	.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	88.4/ 14/ .8295	72.3/ 14/ .5328	84.0/ 14/ .7351	71.6/ 14/ .5224
CO2 BCKGRD METER/RANGE/PCT	12.8/ 14/ .0430	12.7/ 14/ .0426	12.8/ 14/ .0430	13.0/ 14/ .0438
NOX SAMPLE METER/RANGE/PPM	36.9/ 1/ 9.3	.5/ 1/ .1	3.4/ 1/ .9	.8/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	1.5/ 1/ .4	.5/ 1/ .1	.6/ 1/ .2	.6/ 1/ .2
DILUTION FACTOR	13.48	22.30	16.15	22.72
THC CONCENTRATION PPM	82.	0.	2.	1.
CO CONCENTRATION PPM	443.	4.	13.	7.
CO2 CONCENTRATION PCT	.7897	.4920	.6948	.4806
NOX CONCENTRATION PPM	8.9	.0	.7	.1
THC MASS GRAMS	6.87	.00	.20	.19
CO MASS GRAMS	37.52	.52	1.08	1.04
CO2 MASS GRAMS	1051.7	1117.8	914.1	1089.2
NOX MASS GRAMS	1.30	.00	.11	.01
THC GRAMS/MI	1.93	.00	.06	.05
CO GRAMS/MI	10.51	.14	.30	.27
CO2 GRAMS/MI	294.6	292.1	256.3	284.7
NOX GRAMS/MI	.37	.00	.03	.00
FUEL ECONOMY IN MPG	15.13 15.70	16.26	18.51 17.51	16.67
RUN TIME SECONDS	505.	868.	504.	868.
MEASURED DISTANCE MI	3.57 7.40	3.83	3.57 7.39	3.83
SCF, DRY	.962 .965	.967	.964 .966	.967
DFC, WET (DRY)	.944(.922)		.949(.927)	
TOT VOL (SCM) / SAM BLR (SCM)	196.8/ .00		195.7/ .00	

COMPOSITE RESULTS

TEST NUMBER		TDC4K-01
BAROMETER	MM HG	738.4
HUMIDITY	G/KG	12.2
TEMPERATURE	DEG C	21.7

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	282.8	(280.6)
FUEL ECONOMY	MPG	16.56	(16.68)
HYDROCARBONS (THC)	G/MI	.42	(.43)
CARBON MONOXIDE	G/MI	2.34	(2.38)
OXIDES OF NITROGEN	G/MI	.08	(.09)

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08- -001

TEST NO. TDC4K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 737.87 MM HG(29.05 IN HG)
RELATIVE HUMIDITY 65. PCT
BAG RESULTS

VEHICLE NO.311
DATE 5/20/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.7 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 44006. KM(27344. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.03

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)		40.6 (105.0)
BLOWER REVOLUTIONS		60587.
TOT FLOW STD. CU. METRES(SCF)		109.0 (3849.)
THC SAMPLE METER/RANGE/PPM		15.8/ 2/ 16.
THC BCKGRD METER/RANGE/PPM		11.0/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		20.2/ 12/ 20.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		95.3/ 14/1.0063
CO2 BCKGRD METER/RANGE/PCT		13.2/ 14/ .0446
NOX SAMPLE METER/RANGE/PPM		3.6/ 1/ .9
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		11.80
THC CONCENTRATION PPM		6.
CO CONCENTRATION PPM		19.
CO2 CONCENTRATION PCT		.9655
NOX CONCENTRATION PPM		.8
THC MASS GRAMS		.72
CO MASS GRAMS		2.38
CO2 MASS GRAMS		1927.0
NOX MASS GRAMS		.17
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.915 (.896)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		109.0
SAM BLR (SCM)		.00
MI (MEASURED)		10.10
TEST NUMBER,		TDC4K-01
BAROMETER,	MM HG	737.9
HUMIDITY,	G/KG	11.7
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	190.9
FUEL ECONOMY,	MPG	24.8
HYDROCARBONS, (THC)	G/MI	.07
CARBON MONOXIDE,	G/MI	.24
OXIDES OF NITROGEN,	G/MI	.02

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TEST NO. TDC4K-01 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.63 MM HG(29.08 IN HG)
RELATIVE HUMIDITY 62. PCT

VEHICLE NO.311
DATE 5/20/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 11.5 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 44024. KM(27355. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.03

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)		41.1 (106.0)
BLOWER REVOLUTIONS		47467.
TOT FLOW STD. CU. METRES(SCF)		85.4 (3014.)
THC SAMPLE METER/RANGE/PPM		11.9/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		11.0/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		7.3/ 12/ 7.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		62.8/ 14/ .4061
CO2 BCKGRD METER/RANGE/PCT		13.1/ 14/ .0442
NOX SAMPLE METER/RANGE/PPM		1.8/ 1/ .5
NOX BCKGRD METER/RANGE/PPM		.7/ 1/ .2
DILUTION FACTOR		29.19
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		7.
CO2 CONCENTRATION PCT		.3634
NOX CONCENTRATION PPM		.3
THC MASS GRAMS		.12
CO MASS GRAMS		.66
CO2 MASS GRAMS		567.9
NOX MASS GRAMS		.05
RUN TIME	SECONDS	599.
DFC, WET (DRY)		.966 (.946)
SCF, WET (DRY)		1.000 (.973)
VOL (SCM)		85.4
SAM BLR (SCM)		.00
MI (MEASURED)		1.15

TEST NUMBER,		TDC4K-01
BAROMETER,	MM HG	738.6
HUMIDITY,	G/KG	11.5
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	493.8
FUEL ECONOMY,	MPG	9.6
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	.58
OXIDES OF NITROGEN,	G/MI	.04

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TEST NO. TDC4K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 5/21/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 44027. KM(27357. MILES)

BAROMETER 738.12 MM HG(29.06 IN HG)
RELATIVE HUMIDITY 66. PCT

DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 12.2 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)	40.0 (104.0)	37.8 (100.0)	40.6 (105.0)	37.8 (100.0)
BLOWER REVOLUTIONS	40304.	68998.	40051.	68741.
TOT FLOW STD. CU. METRES(SCF)	72.7 (2568.)	125.4 (4428.)	72.1 (2546.)	124.9 (4411.)
THC SAMPLE METER/RANGE/PPM	19.0/ 3/ 189.	13.7/ 2/ 14.	13.9/ 2/ 14.	12.8/ 2/ 13.
THC BCKGRD METER/RANGE/PPM	1.6/ 3/ 16.	13.9/ 2/ 14.	12.0/ 2/ 12.	11.5/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	72.6/ 14/ 344.	6.5/ 12/ 7.	8.8/ 12/ 9.	9.6/ 12/ 10.
CO BCKGRD METER/RANGE/PPM	.1/ 14/ 0.	.5/ 12/ 1.	.9/ 12/ 1.	.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	89.2/ 14/ .8481	72.5/ 14/ .5357	84.0/ 14/ .7351	72.0/ 14/ .5283
CO2 BCKGRD METER/RANGE/PCT	13.5/ 14/ .0458	14.1/ 14/ .0482	15.0/ 14/ .0519	15.6/ 14/ .0544
NOX SAMPLE METER/RANGE/PPM	34.3/ 1/ 8.6	1.5/ 1/ .4	3.8/ 1/ 1.0	1.7/ 1/ .4
NOX BCKGRD METER/RANGE/PPM	1.8/ 1/ .5	1.5/ 1/ .4	1.5/ 1/ .4	1.7/ 1/ .4
DILUTION FACTOR	13.24	22.15	16.15	22.45
THC CONCENTRATION PPM	175.	0.	3.	2.
CO CONCENTRATION PPM	328.	6.	8.	8.
CO2 CONCENTRATION PCT	.8058	.4897	.6864	.4764
NOX CONCENTRATION PPM	8.2	.0	.6	.0
THC MASS GRAMS	14.56	.06	.22	.26
CO MASS GRAMS	27.81	.85	.64	1.23
CO2 MASS GRAMS	1072.8	1124.3	906.2	1089.4
NOX MASS GRAMS	1.20	.00	.09	.01
THC GRAMS/MI	4.07	.02	.06	.07
CO GRAMS/MI	7.78	.22	.18	.32
CO2 GRAMS/MI	300.0	292.0	254.8	283.7
NOX GRAMS/MI	.34	.00	.03	.00
FUEL ECONOMY IN MPG	14.92 15.59	16.26	18.63 17.59	16.72
RUN TIME SECONDS	505.	869.	505.	867.
MEASURED DISTANCE MI	3.58 7.43	3.85	3.56 7.40	3.84
SCF, DRY	.964 .967	.969	.966 .968	.969
DPC, WET (DRY)	.944(.924)		.949(.929)	
TOT VOL (SCM) / SAM BLR (SCM)	198.1/ .00		197.0/ .00	

COMPOSITE RESULTS

TEST NUMBER		TDC4K-02
BAROMETER	MM HG	738.1
HUMIDITY	G/KG	12.2
TEMPERATURE	DEG C	23.3

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	283.5	(281.0)
FUEL ECONOMY	MPG	16.53	(16.67)
HYDROCARBONS (THC)	G/MI	.87	(.88)
CARBON MONOXIDE	G/MI	1.77	(1.80)
OXIDES OF NITROGEN	G/MI	.08	(.08)

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PROJECT 08- -001

TEST NO. TDC4K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.38 MM HG(29.07 IN HG)
RELATIVE HUMIDITY 61. PCT

VEHICLE NO.311
DATE 5/21/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 11.0 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 44051. KM(27372. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.01

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)		41.1 (106.0)
BLOWER REVOLUTIONS		60635.
TOT FLOW STD. CU. METRES(SCF)		109.0 (3849.)
THC SAMPLE METER/RANGE/PPM		15.7/ 2/ 16.
THC BCKGRD METER/RANGE/PPM		10.7/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		20.5/ 12/ 20.
CO BCKGRD METER/RANGE/PPM		.2/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		95.1/ 14/1.0006
CO2 BCKGRD METER/RANGE/PCT		14.6/ 14/ .0502
NOX SAMPLE METER/RANGE/PPM		6.6/ 1/ 1.7
NOX BCKGRD METER/RANGE/PPM		1.3/ 1/ .3
DILUTION FACTOR		11.86
THC CONCENTRATION PPM		6.
CO CONCENTRATION PPM		19.
CO2 CONCENTRATION PCT		.9546
NOX CONCENTRATION PPM		1.4
THC MASS GRAMS		.74
CO MASS GRAMS		2.45
CO2 MASS GRAMS		1904.9
NOX MASS GRAMS		.30
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.916 (.898)
SCF, WET (DRY)		1.000 (.963)
VOL (SCM)		109.0
SAM BLR (SCM)		.00
MI (MEASURED)		10.09
TEST NUMBER,		TDC4K-02
BAROMETER,	MM HG	738.4
HUMIDITY,	G/KG	11.0
TEMPERATURE,	DEG C	22.8
CARBON DIOXIDE,	G/MI	188.8
FUEL ECONOMY,	MPG	25.1
HYDROCARBONS, (THC)	G/MI	.07
CARBON MONOXIDE,	G/MI	.24
OXIDES OF NITROGEN,	G/MI	.03

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TEST NO. TDC4K-02 RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 738.63 MM HG(29.08 IN HG)
RELATIVE HUMIDITY 58. PCT
BAG RESULTS

VEHICLE NO.311
DATE 5/21/91
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 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL M85
ODOMETER 44067. KM(27382. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR 1.00

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)		40.0 (104.0)
BLOWER REVOLUTIONS		47432.
TOT FLOW STD. CU. METRES(SCF)		85.6 (3023.)
THC SAMPLE METER/RANGE/PPM		12.1/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		10.8/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		12.3/ 12/ 12.
CO BCKGRD METER/RANGE/PPM		.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		62.1/ 14/ .3978
CO2 BCKGRD METER/RANGE/PCT		14.5/ 14/ .0498
NOX SAMPLE METER/RANGE/PPM		2.9/ 1/ .8
NOX BCKGRD METER/RANGE/PPM		1.4/ 1/ .4
DILUTION FACTOR		29.76
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		11.
CO2 CONCENTRATION PCT		.3496
NOX CONCENTRATION PPM		.4
THC MASS GRAMS		.16
CO MASS GRAMS		1.11
CO2 MASS GRAMS		548.0
NOX MASS GRAMS		.07
RUN TIME	SECONDS	599.
DFC, WET (DRY)		.966 (.948)
SCF, WET (DRY)		1.000 (.974)
VOL (SCM)		85.6
SAM BLR (SCM)		.00
MI (MEASURED)		1.12
TEST NUMBER,		TDC4K-02
BAROMETER,	MM HG	738.6
HUMIDITY,	G/KG	10.8
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	491.0
FUEL ECONOMY,	MPG	9.6
HYDROCARBONS, (THC)	G/MI	.15
CARBON MONOXIDE,	G/MI	.99
OXIDES OF NITROGEN,	G/MI	.06

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TEST NO. TDC4K-1R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 10/ 8/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-F
ODOMETER 44130. KM(27421. MILES)

BAROMETER 746.25 MM HG(29.38 IN HG)
RELATIVE HUMIDITY 44. PCT

DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
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. H2O(IN. H2O)	1054.1 (41.5)	1054.1 (41.5)	1041.4 (41.0)	1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)	1117.6 (44.0)	1104.9 (43.5)	1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.3 (110.0)	39.4 (103.0)	41.1 (106.0)	39.4 (103.0)
BLOWER REVOLUTIONS	40170.	68763.	40001.	68620.
TOT FLOW STD. CU. METRES(SCF)	71.6 (2527.)	123.4 (4357.)	71.7 (2531.)	123.1 (4347.)
THC SAMPLE METER/RANGE/PPM	62.5/ 2/ 62.	17.4/ 2/ 17.	19.2/ 2/ 19.	17.9/ 2/ 18.
THC BCKGRD METER/RANGE/PPM	15.2/ 2/ 15.	16.3/ 2/ 16.	16.5/ 2/ 16.	16.9/ 2/ 17.
CO SAMPLE METER/RANGE/PPM	63.0/ 14/ 291.	20.0/ 12/ 20.	28.0/ 12/ 28.	25.0/ 12/ 25.
CO BCKGRD METER/RANGE/PPM	.6/ 14/ 2.	1.8/ 12/ 2.	1.6/ 12/ 2.	1.6/ 12/ 2.
CO2 SAMPLE METER/RANGE/PCT	89.6/ 14/ .8575	73.3/ 14/ .5478	85.0/ 14/ .7555	73.0/ 14/ .5432
CO2 BCKGRD METER/RANGE/PCT	15.0/ 14/ .0519	14.7/ 14/ .0506	14.9/ 14/ .0515	14.9/ 14/ .0515
NOX SAMPLE METER/RANGE/PPM	60.9/ 1/ 15.3	1.1/ 1/ .3	4.5/ 1/ 1.2	.6/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	.8/ 1/ .2	.9/ 1/ .2	.6/ 1/ .2	.5/ 1/ .1
DILUTION FACTOR	13.36	21.60	15.67	21.76
THC CONCENTRATION PPM	48.	2.	4.	2.
CO CONCENTRATION PPM	277.	18.	25.	23.
CO2 CONCENTRATION PCT	.8095	.4995	.7073	.4942
NOX CONCENTRATION PPM	15.1	.1	1.0	.0
THC MASS GRAMS	3.97	.26	.31	.25
CO MASS GRAMS	23.11	2.54	2.12	3.25
CO2 MASS GRAMS	1060.7	1128.3	928.1	1113.7
NOX MASS GRAMS	1.91	.01	.13	.01
THC GRAMS/MI	1.11	.07	.09	.06
CO GRAMS/MI	6.46	.66	.59	.84
CO2 GRAMS/MI	296.3	290.9	257.5	287.9
NOX GRAMS/MI	.53	.00	.04	.00
FUEL ECONOMY IN MPG	15.42	15.86 16.28	18.39	17.33 16.44
RUN TIME SECONDS	505.	867.	505.	868.
MEASURED DISTANCE MI	3.58	7.46 3.88	3.61	7.47 3.87
SCF, DRY	.971	.974 .976	.972	.975 .976
DFC, WET (DRY)		.943(.930)		.947(.934)
TOT VOL (SCM) / SAM BLR (SCM)		195.0/ .00		194.8/ .00

COMPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER		TDC4K-1R		
BAROMETER	MM HG	746.3		
HUMIDITY	G/KG	8.3		
TEMPERATURE	DEG C	23.9		
CARBON DIOXIDE	G/MI		282.8	(281.9)
FUEL ECONOMY	MPG		16.61	(16.66)
HYDROCARBONS (THC)	G/MI		.29	(.29)
CARBON MONOXIDE	G/MI		1.83	(1.89)
OXIDES OF NITROGEN	G/MI		.12	(.12)

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

TEST NO. TDC4K-1R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 49. PCT

VEHICLE NO.311
DATE 10/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 8.4 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-F
ODOMETER 44154. KM(27436. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .93

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1041.4 (41.0)
BLOWER INLET P MM. H2O(IN. H2O)		1104.9 (43.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.8 (109.0)
BLOWER REVOLUTIONS		60543.
TOT FLOW STD. CU. METRES(SCF)		108.2 (3821.)
THC SAMPLE METER/RANGE/PPM		15.2/ 2/ 15.
THC BCKGRD METER/RANGE/PPM		10.8/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		18.3/ 12/ 18.
CO BCKGRD METER/RANGE/PPM		.7/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		95.0/ 14/ .9977
CO2 BCKGRD METER/RANGE/PCT		12.7/ 14/ .0426
NOX SAMPLE METER/RANGE/PPM		4.4/ 1/ 1.2
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		11.90
THC CONCENTRATION PPM		5.
CO CONCENTRATION PPM		17.
CO2 CONCENTRATION PCT		.9587
NOX CONCENTRATION PPM		1.0
THC MASS GRAMS		.66
CO MASS GRAMS		2.13
CO2 MASS GRAMS		1899.4
NOX MASS GRAMS		.19
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.916 (.901)
SCF, WET (DRY)		1.000 (.967)
VOL (SCM)		108.2
SAM BLR (SCM)		.00
MI (MEASURED)		10.20
TEST NUMBER,		TDC4K-1R
BAROMETER,	MM HG	746.8
HUMIDITY,	G/KG	8.4
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	186.1
FUEL ECONOMY,	MPG	25.5
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.21
OXIDES OF NITROGEN,	G/MI	.02

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PROJECT 08-3381-001

TEST NO. TDC4K-1R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 746.76 MM HG(29.40 IN HG)
RELATIVE HUMIDITY 49. PCT

VEHICLE NO.311
DATE 10/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 8.4 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-P
ODOMETER 44170. KM(27446. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .93

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1041.4 (41.0)
BLOWER INLET P MM. H2O(IN. H2O)		1104.9 (43.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		47125.
TOT FLOW STD. CU. METRES(SCF)		84.3 (2977.)
THC SAMPLE METER/RANGE/PPM		10.4/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		8.8/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		20.8/ 12/ 21.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		63.3/ 14/ .4121
CO2 BCKGRD METER/RANGE/PCT		12.4/ 14/ .0415
NOX SAMPLE METER/RANGE/PPM		.9/ 1/ .2
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		28.69
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		20.
CO2 CONCENTRATION PCT		.3721
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.18
CO MASS GRAMS		1.94
CO2 MASS GRAMS		574.4
NOX MASS GRAMS		.02
RUN TIME	SECONDS	595.
DFC, WET (DRY)		.965 (.950)
SCF, WET (DRY)		1.000 (.977)
VOL (SCM)		84.3
SAM BLR (SCM)		.00
MI (MEASURED)		1.18

TEST NUMBER,		TDC4K-1R
BAROMETER,	MM HG	746.8
HUMIDITY,	G/KG	8.4
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	487.9
FUEL ECONOMY,	MPG	9.7
HYDROCARBONS, (THC)	G/MI	.16
CARBON MONOXIDE,	G/MI	1.65
OXIDES OF NITROGEN,	G/MI	.01

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TEST NO. TDC4K-2R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

VEHICLE NO.311
DATE 10/ 9/91
BAG CART NO. 2 / CVS NO. 2
DYNO NO. 3

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-F
ODOMETER 44181. KM(27453. MILES)

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 52. PCT

DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 8.6 GM/KG

NOX HUMIDITY CORRECTION FACTOR .94

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	1041.4 (41.0)	1041.4 (41.0)	1066.8 (42.0)	1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)	1117.6 (44.0)	1117.6 (44.0)	1130.3 (44.5)	1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)	41.7 (107.0)	39.4 (103.0)	42.8 (109.0)	40.0 (104.0)
BLOWER REVOLUTIONS	40095.	68748.	39976.	68613.
TOT FLOW STD. CU. METRES(SCF)	71.7 (2532.)	123.4 (4359.)	71.2 (2513.)	122.8 (4335.)
THC SAMPLE METER/RANGE/PPM	59.6/ 2/ 60.	11.9/ 2/ 12.	14.6/ 2/ 15.	10.1/ 2/ 10.
THC BCKGRD METER/RANGE/PPM	11.3/ 2/ 11.	10.5/ 2/ 10.	8.7/ 2/ 9.	7.9/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	63.3/ 14/ 292.	24.8/ 12/ 25.	40.4/ 12/ 40.	34.1/ 12/ 34.
CO BCKGRD METER/RANGE/PPM	.3/ 14/ 1.	1.0/ 12/ 1.	.6/ 12/ 1.	.6/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	88.9/ 14/ .8411	72.7/ 14/ .5387	84.4/ 14/ .7432	72.5/ 14/ .5357
CO2 BCKGRD METER/RANGE/PCT	13.1/ 14/ .0442	13.0/ 14/ .0438	12.7/ 14/ .0426	12.7/ 14/ .0426
NOX SAMPLE METER/RANGE/PPM	41.7/ 1/ 10.5	.9/ 1/ .2	6.5/ 1/ 1.7	.4/ 1/ .1
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	.9/ 1/ .2	.4/ 1/ .1	.4/ 1/ .1
DILUTION FACTOR	13.61	21.96	15.91	22.06
THC CONCENTRATION PPM	49.	2.	6.	3.
CO CONCENTRATION PPM	279.	23.	38.	32.
CO2 CONCENTRATION PCT	.8001	.4969	.7033	.4950
NOX CONCENTRATION PPM	10.2	.0	1.6	.0
THC MASS GRAMS	4.04	.27	.53	.36
CO MASS GRAMS	23.32	3.31	3.16	4.61
CO2 MASS GRAMS	1050.4	1123.1	916.4	1112.8
NOX MASS GRAMS	1.31	.00	.20	.00
THC GRAMS/MI	1.13	.07	.15	.09
CO GRAMS/MI	6.52	.85	.88	1.18
CO2 GRAMS/MI	293.8	289.3	256.2	285.3
NOX GRAMS/MI	.37	.00	.06	.00
FUEL ECONOMY IN MPG	15.55 15.96	16.35	18.44 17.40	16.55
RUN TIME SECONDS	505.	868.	504.	868.
MEASURED DISTANCE MI	3.58 7.46	3.88	3.58 7.48	3.90
SCF, DRY	.968 .972	.974	.970 .972	.974
DFC, WET (DRY)	.944(.928)		.948(.932)	
TOT VOL (SCM) / SAM BLR (SCM)	195.1/ .00		194.0/ .00	

COMPOSITE RESULTS

TEST NUMBER		TDC4K-2R
BAROMETER	MM HG	746.5
HUMIDITY	G/KG	8.6
TEMPERATURE	DEG C	21.7

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	281.2	(280.0)
FUEL ECONOMY	MPG	16.69	(16.75)
HYDROCARBONS (THC)	G/MI	.31	(.32)
CARBON MONOXIDE	G/MI	2.03	(2.13)
OXIDES OF NITROGEN	G/MI	.09	(.09)

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TEST NO. TDC4K-2R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 746.51 MM HG(29.39 IN HG)
RELATIVE HUMIDITY 56. PCT

VEHICLE NO.311
DATE 10/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 9.3 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-F
ODOMETER 44205. KM(27468. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .96

BAG RESULTS

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		1066.8 (42.0)
BLOWER INLET P MM. H2O(IN. H2O)		1130.3 (44.5)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		60543.
TOT FLOW STD. CU. METRES(SCF)		107.7 (3802.)
THC SAMPLE METER/RANGE/PPM		12.3/ 2/ 12.
THC BCKGRD METER/RANGE/PPM		7.9/ 2/ 8.
CO SAMPLE METER/RANGE/PPM		23.3/ 12/ 23.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		94.4/ 14/ .9809
CO2 BCKGRD METER/RANGE/PCT		12.6/ 14/ .0422
NOX SAMPLE METER/RANGE/PPM		6.0/ 1/ 1.6
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		12.10
THC CONCENTRATION PPM		5.
CO CONCENTRATION PPM		22.
CO2 CONCENTRATION PCT		.9421
NOX CONCENTRATION PPM		1.5
THC MASS GRAMS		.62
CO MASS GRAMS		2.73
CO2 MASS GRAMS		1857.2
NOX MASS GRAMS		.29
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.917 (.901)
SCF, WET (DRY)		1.000 (.965)
VOL (SCM)		107.7
SAM BLR (SCM)		.00
MI (MEASURED)		10.08
TEST NUMBER,		TDC4K-2R
BAROMETER,	MM HG	746.5
HUMIDITY,	G/KG	9.3
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	184.2
FUEL ECONOMY,	MPG	25.7
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.27
OXIDES OF NITROGEN,	G/MI	.03

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TEST NO. TDC4K-2R RUN
VEHICLE MODEL 86 TOYOTA CAMRY
ENGINE 2.0 L(122. CID) L-4
TRANSMISSION A3

BAROMETER 746.25 MM HG(29.38 IN HG)
RELATIVE HUMIDITY 53. PCT

VEHICLE NO.311
DATE 10/ 9/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 9.1 GM/KG

TEST WEIGHT 1361. KG(3000. LBS)
ACTUAL ROAD LOAD 5.5 KW(7.4 HP)
METHANOL EM-1179-F
ODOMETER 44222. KM(27478. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .95

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		1054.1 (41.5)
BLOWER INLET P MM. H2O(IN. H2O)		1117.6 (44.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47056.
TOT FLOW STD. CU. METRES(SCF)		83.8 (2959.)
THC SAMPLE METER/RANGE/PPM		10.1/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		7.7/ 2/ 8.
CO SAMPLE METER/RANGE/PPM		30.2/ 12/ 30.
CO BCKGRD METER/RANGE/PPM		.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		63.2/ 14/ .4109
CO2 BCKGRD METER/RANGE/PCT		13.0/ 14/ .0438
NOX SAMPLE METER/RANGE/PPM		.7/ 1/ .2
NOX BCKGRD METER/RANGE/PPM		.4/ 1/ .1
DILUTION FACTOR		28.71
THC CONCENTRATION PPM		3.
CO CONCENTRATION PPM		28.
CO2 CONCENTRATION PCT		.3686
NOX CONCENTRATION PPM		.1
THC MASS GRAMS		.26
CO MASS GRAMS		2.78
CO2 MASS GRAMS		565.6
NOX MASS GRAMS		.01
RUN TIME	SECONDS	595.
DFC, WET (DRY)		.965 (.949)
SCF, WET (DRY)		1.000 (.976)
VOL (SCM)		83.8
SAM BLR (SCM)		.00
MI (MEASURED)		1.17

TEST NUMBER,		TDC4K-2R
BAROMETER,	MM HG	746.3
HUMIDITY,	G/KG	9.1
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	482.3
FUEL ECONOMY,	MPG	9.8
HYDROCARBONS, (THC)	G/MI	.22
CARBON MONOXIDE,	G/MI	2.37
OXIDES OF NITROGEN,	G/MI	.01

APPENDIX Q

COMPUTER PRINTOUTS OF CHEVROLET CORSICA TASK 3 EMISSION TEST RESULTS

Page Q-	Test No.	Fuel	Catalyst	Test Cycle
2	C1HC0K-01	Howell EEE	Camet	FTP
3	C1HC0K-01	Howell EEE	Camet	HFET
4	C1HC0K-01	Howell EEE	Camet	NYCC
5	C1HC0K-02	Howell EEE	Camet	FTP
6	C1HC0K-02	Howell EEE	Camet	HFET
7	C1HC0K-02	Howell EEE	Camet	NYCC
8	C2HC0K-01	M85	Camet	FTP
9	C2HC0K-01	M85	Camet	HFET
10	C2HC0K-01	M85	Camet	NYCC
11	C2HC0K-02	M85	Camet	FTP
12	C2HC0K-02	M85	Camet	HFET
13	C2HC0K-02	M85	Camet	NYCC
14	C2HC2K-01	M85	Camet	FTP
15	C2HC2K-01	M85	Camet	HFET
16	C2HC2K-01	M85	Camet	NYCC
17	C2HC2K-02	M85	Camet	FTP
18	C2HC2K-02	M85	Camet	HFET
19	C2HC2K-02	M85	Camet	NYCC
20	C2HC4K-01	M85	Camet	FTP
21	C2HC4K-01	M85	Camet	HFET
22	C2HC4K-01	M85	Camet	NYCC
23	C2HC4K-02	M85	Camet	FTP
24	C2HC4K-02	M85	Camet	HFET
25	C2HC4K-02	M85	Camet	NYCC

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C1HCOK-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

VEHICLE NO.934
DATE 10/29/91
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-1344-F
ODOMETER 5029. KM(3125. MILES)

AROMETER 738.63 MM HG(29.08 IN HG)
ELATIVE HUMIDITY 59. PCT
AG RESULTS

DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 11.2 GM/KG

NOX HUMIDITY CORRECTION FACTOR 1.02

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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)	41.1 (106.0)	41.1 (106.0)	45.0 (113.0)	42.8 (109.0)
BLOWER REVOLUTIONS	40467.	69391.	40414.	69390.
TOT FLOW STD. CU. METRES(SCF)	75.4 (2661.)	129.2 (4563.)	74.9 (2644.)	128.8 (4549.)
THC SAMPLE METER/RANGE/PPM	16.5/ 2/ 16.	12.1/ 2/ 12.	19.8/ 2/ 20.	12.5/ 2/ 12.
THC BCKGRD METER/RANGE/PPM	12.3/ 2/ 12.	12.1/ 2/ 12.	11.8/ 2/ 12.	11.3/ 2/ 11.
CO SAMPLE METER/RANGE/PPM	1.0/ 12/ 1.	7.9/ 12/ 8.	31.9/ 12/ 32.	23.7/ 12/ 24.
CO BCKGRD METER/RANGE/PPM	.4/ 12/ 0.	.5/ 12/ 1.	.8/ 12/ 1.	1.1/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	70.7/ 1/1.3071	87.8/ 14/ .8159	98.1/ 14/1.0908	87.4/ 14/ .8070
CO2 BCKGRD METER/RANGE/PCT	2.7/ 1/ .0473	13.5/ 14/ .0458	14.7/ 14/ .0506	14.9/ 14/ .0515
NOX SAMPLE METER/RANGE/PPM	36.1/ 1/ 9.1	2.0/ 1/ .5	11.8/ 1/ 3.0	1.4/ 1/ .4
NOX BCKGRD METER/RANGE/PPM	.7/ 1/ .2	.8/ 1/ .2	1.2/ 1/ .3	1.4/ 1/ .4
DILUTION FACTOR	10.24	16.38	12.23	16.53
THC CONCENTRATION PPM	5.	1.	9.	2.
CO CONCENTRATION PPM	1.	7.	30.	22.
CO2 CONCENTRATION PCT	1.2644	.7729	1.0443	.7586
NOX CONCENTRATION PPM	8.9	.3	2.8	.0
THC MASS GRAMS	.23	.06	.39	.14
CO MASS GRAMS	.05	1.09	2.59	3.27
CO2 MASS GRAMS	1744.7	1828.7	1431.5	1789.4
NOX MASS GRAMS	1.31	.08	.40	.01
THC GRAMS/MI	.07	.01	.11	.04
CO GRAMS/MI	.02	.28	.73	.85
CO2 GRAMS/MI	493.1	477.9	402.1	464.5
NOX GRAMS/MI	.37	.02	.11	.00
FUEL ECONOMY IN MPG	17.97 18.26	18.54	21.97 20.34	19.03
RUN TIME SECONDS	506.	868.	505.	867.
MEASURED DISTANCE MI	3.54 7.36	3.83	3.56 7.41	3.85
SCF, DRY	.969 .972	.973	.971 .973	.974
DFC, WET (DRY)	.925(.908)		.932(.914)	
TOT VOL (SCM) / SAM BLR (SCM)	204.6/ .00		203.7/ .00	

OMPOSITE RESULTS

TEST NUMBER		C1HCOK-01
BAROMETER	MM HG	738.6
HUMIDITY	G/KG	11.2
TEMPERATURE	DEG C	23.9

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	460.2	(456.3)
FUEL ECONOMY	MPG	19.24	(19.39)
HYDROCARBONS (THC)	G/MI	.05	(.06)
CARBON MONOXIDE	G/MI	.35	(.52)
OXIDES OF NITROGEN	G/MI	.12	(.11)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C1HCOK-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 737.87 MM HG(29.05 IN HG)
ELATIVE HUMIDITY 49. PCT
AG RESULTS

VEHICLE NO.934
DATE 10/29/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 10.0 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1344-F
ODOMETER 5053. KM(3140. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .98

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		45.6 (114.0)
BLOWER REVOLUTIONS		61936.
TOT FLOW STD. CU. METRES(SCF)		114.7 (4051.)
THC SAMPLE METER/RANGE/PPM		16.5/ 2/ 16.
THC BCKGRD METER/RANGE/PPM		11.1/ 2/ 11.
CO SAMPLE METER/RANGE/PPM		14.2/ 12/ 14.
CO BCKGRD METER/RANGE/PPM		1.2/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		78.2/ 1/1.4456
CO2 BCKGRD METER/RANGE/PCT		3.1/ 1/ .0543
NOX SAMPLE METER/RANGE/PPM		15.5/ 1/ 4.0
NOX BCKGRD METER/RANGE/PPM		1.5/ 1/ .4
DILUTION FACTOR		9.25
THC CONCENTRATION PPM		7.
CO CONCENTRATION PPM		13.
CO2 CONCENTRATION PCT		1.3971
NOX CONCENTRATION PPM		3.6
THC MASS GRAMS		.44
CO MASS GRAMS		1.68
CO2 MASS GRAMS		2934.4
NOX MASS GRAMS		.78
RUN TIME	SECONDS	774.
DFC, WET (DRY)		.892 (.878)
SCF, WET (DRY)		1.000 (.971)
VOL (SCM)		114.7
SAM BLR (SCM)		.00
MI (MEASURED)		10.07
TEST NUMBER,		C1HCOK-01
BAROMETER,	MM HG	737.9
HUMIDITY,	G/KG	10.0
TEMPERATURE,	DEG C	25.0
CARBON DIOXIDE,	G/MI	291.4
FUEL ECONOMY,	MPG	30.4
HYDROCARBONS, (THC)	G/MI	.04
CARBON MONOXIDE,	G/MI	.17
OXIDES OF NITROGEN,	G/MI	.08

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C1HCOK-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

ROMETER 751.08 MM HG(29.57 IN HG)
ELATIVE HUMIDITY 24. PCT
AG RESULTS

VEHICLE NO.934
DATE 11/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 3.9 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1373-F
ODOMETER 5172. KM(3214. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .82

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		41.7 (107.0)
BLOWER REVOLUTIONS		47724.
TOT FLOW STD. CU. METRES(SCF)		90.5 (3194.)
THC SAMPLE METER/RANGE/PPM		7.6/ 2/ 8.
THC BCKGRD METER/RANGE/PPM		6.6/ 2/ 7.
CO SAMPLE METER/RANGE/PPM		7.7/ 12/ 8.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		78.5/ 14/ .6323
CO2 BCKGRD METER/RANGE/PCT		13.5/ 14/ .0458
NOX SAMPLE METER/RANGE/PPM		3.7/ 1/ 1.0
NOX BCKGRD METER/RANGE/PPM		.9/ 1/ .2
DILUTION FACTOR		21.14
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		8.
CO2 CONCENTRATION PCT		.5887
NOX CONCENTRATION PPM		.7
THC MASS GRAMS		.07
CO MASS GRAMS		.80
CO2 MASS GRAMS		975.0
NOX MASS GRAMS		.11
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.953 (.945)
SCF, WET (DRY)		1.000 (.986)
VOL (SCM)		90.5
SAM BLR (SCM)		.00
MI (MEASURED)		1.13
TEST NUMBER,		C1HCOK-01
BAROMETER,	MM HG	751.1
HUMIDITY,	G/KG	3.9
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	859.6
FUEL ECONOMY,	MPG	10.3
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.71
OXIDES OF NITROGEN,	G/MI	.09

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. C1HC0K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 11/ 8/91
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-1373-F
ODOMETER 5114. KM(3178. MILES)

BAROMETER 754.63 MM HG(29.71 IN HG)
RELATIVE HUMIDITY 22. PCT
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 3.6 GM/KG

NOX HUMIDITY CORRECTION FACTOR .81

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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)	40.0 (104.0)	38.9 (102.0)	41.7 (107.0)	40.0 (104.0)
BLOWER REVOLUTIONS	40457.	69457.	40433.	69428.
TOT FLOW STD. CU. METRES(SCF)	77.3 (2730.)	133.0 (4698.)	77.0 (2720.)	132.7 (4685.)
THC SAMPLE METER/RANGE/PPM	14.4/ 2/ 14.	8.3/ 2/ 8.	9.1/ 2/ 9.	9.1/ 2/ 9.
THC BCKGRD METER/RANGE/PPM	6.8/ 2/ 7.	8.1/ 2/ 8.	7.9/ 2/ 8.	8.9/ 2/ 9.
CO SAMPLE METER/RANGE/PPM	8.7/ 12/ 9.	.9/ 12/ 1.	3.8/ 12/ 4.	4.3/ 12/ 4.
CO BCKGRD METER/RANGE/PPM	.5/ 12/ 1.	.5/ 12/ 1.	.6/ 12/ 1.	.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	67.6/ 1/1.2502	86.9/ 14/ .7960	56.7/ 1/1.0506	86.6/ 14/ .7894
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	13.1/ 14/ .0442	2.5/ 1/ .0437	13.0/ 14/ .0438
NOX SAMPLE METER/RANGE/PPM	54.9/ 1/ 13.8	4.8/ 1/ 1.3	23.5/ 1/ 6.0	1.4/ 1/ .4
NOX BCKGRD METER/RANGE/PPM	.4/ 1/ .1	.6/ 1/ .2	.5/ 1/ .1	.7/ 1/ .2
DILUTION FACTOR	10.70	16.82	12.74	16.95
THC CONCENTRATION PPM	8.	1.	2.	1.
CO CONCENTRATION PPM	8.	0.	3.	4.
CO2 CONCENTRATION PCT	1.2106	.7544	1.0103	.7482
NOX CONCENTRATION PPM	13.7	1.1	5.9	.2
THC MASS GRAMS	.37	.05	.08	.06
CO MASS GRAMS	.72	.06	.29	.60
CO2 MASS GRAMS	1713.9	1837.5	1425.0	1817.7
NOX MASS GRAMS	1.64	.23	.70	.04
THC GRAMS/MI	.10	.01	.02	.01
CO GRAMS/MI	.20	.02	.08	.15
CO2 GRAMS/MI	484.1	476.5	400.3	467.7
NOX GRAMS/MI	.46	.06	.20	.01
FUEL ECONOMY IN MPG	18.29 18.46	18.61	22.14 20.35	18.95
RUN TIME SECONDS	505.	867.	505.	867.
MEASURED DISTANCE MI	3.54 7.40	3.86	3.56 7.45	3.89
SCF, DRY	.981 .984	.986	.983 .985	.986
DFC, WET (DRY)	.928(.922)		.934(.927)	
TOT VOL (SCM) / SAM BLR (SCM)	210.4/ .00		209.7/ .00	

COMPOSITE RESULTS

TEST NUMBER		C1HC0K-02
BAROMETER	MM HG	754.6
HUMIDITY	G/KG	3.6
TEMPERATURE	DEG C	22.2

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	457.2	(454.7)
FUEL ECONOMY	MPG	19.39	(19.49)
HYDROCARBONS (THC)	G/MI	.03	(.03)
CARBON MONOXIDE	G/MI	.07	(.11)
OXIDES OF NITROGEN	G/MI	.18	(.17)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

TEST NO. C1HCOK-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 753.62 MM HG(29.67 IN HG)
RELATIVE HUMIDITY 22. PCT

VEHICLE NO.934
DATE 11/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 3.6 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1373-F
ODOMETER 5139. KM(3193. 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)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		61248.
TOT FLOW STD. CU. METRES(SCF)		116.4 (4110.)
THC SAMPLE METER/RANGE/PPM		10.8/ 2/ 11.
THC BCKGRD METER/RANGE/PPM		9.2/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		4.5/ 12/ 5.
CO BCKGRD METER/RANGE/PPM		.3/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.9/ 1/1.3844
CO2 BCKGRD METER/RANGE/PCT		2.5/ 1/ .0437
NOX SAMPLE METER/RANGE/PPM		17.1/ 1/ 4.4
NOX BCKGRD METER/RANGE/PPM		1.2/ 1/ .3
DILUTION FACTOR		9.67
THC CONCENTRATION PPM		3.
CO CONCENTRATION PPM		4.
CO2 CONCENTRATION PCT		1.3452
NOX CONCENTRATION PPM		4.1
THC MASS GRAMS		.17
CO MASS GRAMS		.56
CO2 MASS GRAMS		2866.7
NOX MASS GRAMS		.74
RUN TIME	SECONDS	765.
DPC, WET (DRY)		.897 (.890)
SCF, WET (DRY)		1.000 (.980)
VOL (SCM)		116.4
SAM BLR (SCM)		.00
MI (MEASURED)		9.92
TEST NUMBER,		C1HCOK-02
BAROMETER,	MM HG	753.6
HUMIDITY,	G/KG	3.6
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	288.9
FUEL ECONOMY,	MPG	30.7
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.06
OXIDES OF NITROGEN,	G/MI	.07

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C1HCOK-02 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 753.36 MM HG(29.66 IN HG)
ELATIVE HUMIDITY 22. PCT
AG RESULTS

VEHICLE NO.934
DATE 11/ 8/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 3.6 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1373-F
ODOMETER 5155. KM(3203. MILES)
C = .866 H = .134 O = .000
FUEL DENSITY = 6.16
NOX HUMIDITY CORRECTION FACTOR .81

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		47740.
TOT FLOW STD. CU. METRES(SCF)		90.7 (3202.)
THC SAMPLE METER/RANGE/PPM		11.3/ 2/ 11.
THC BCKGRD METER/RANGE/PPM		9.2/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		24.6/ 12/ 25.
CO BCKGRD METER/RANGE/PPM		.4/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		78.3/ 14/ .6289
CO2 BCKGRD METER/RANGE/PCT		12.7/ 14/ .0426
NOX SAMPLE METER/RANGE/PPM		2.8/ 1/ .7
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		21.19
THC CONCENTRATION PPM		3.
CO CONCENTRATION PPM		24.
CO2 CONCENTRATION PCT		.5883
NOX CONCENTRATION PPM		.6
THC MASS GRAMS		.13
CO MASS GRAMS		2.50
CO2 MASS GRAMS		976.8
NOX MASS GRAMS		.09
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.953 (.946)
SCF, WET (DRY)		1.000 (.987)
VOL (SCM)		90.7
SAM BLR (SCM)		.00
MI (MEASURED)		1.20
TEST NUMBER,		C1HCOK-02
BAROMETER,	MM HG	753.4
HUMIDITY,	G/KG	3.6
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	817.2
FUEL ECONOMY,	MPG	10.8
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	2.09
OXIDES OF NITROGEN,	G/MI	.07

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C2HCOK-01 RUN	VEHICLE NO.934	TEST WEIGHT 1417. KG(3125. LBS)
EHICLE MODEL 89 CORSICA	DATE 11/11/91	ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
NGINE 2.8 L(171. CID) V-6	BAG CART NO. 2 / CVS NO. 2	GASOLINE EM-1179-F
RANSMISSION A3	DYNO NO. 3	ODOMETER 5200. KM(3231. MILES)
AROMETER 746.25 MM HG(29.38 IN HG)	DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)	
ELATIVE HUMIDITY 46. PCT	ABS. HUMIDITY 8.2 GM/KG	NOX HUMIDITY CORRECTION FACTOR .92

AG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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	40450.	69483.	40446.	69493.
TOT FLOW STD. CU. METRES(SCF)	76.0 (2682.)	130.8 (4617.)	76.0 (2685.)	130.9 (4623.)
THC SAMPLE METER/RANGE/PPM	9.5/ 2/ 9.	7.3/ 2/ 7.	9.3/ 2/ 9.	8.1/ 2/ 8.
THC BCKGRD METER/RANGE/PPM	7.0/ 2/ 7.	7.3/ 2/ 7.	8.0/ 2/ 8.	8.1/ 2/ 8.
CO SAMPLE METER/RANGE/PPM	26.8/ 12/ 27.	1.6/ 12/ 2.	57.3/ 12/ 57.	3.1/ 12/ 3.
CO BCKGRD METER/RANGE/PPM	.5/ 12/ 1.	.5/ 12/ 1.	.6/ 12/ 1.	.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	61.8/ 1/1.1441	82.6/ 14/ .7075	94.0/ 14/ .9698	82.1/ 14/ .6979
CO2 BCKGRD METER/RANGE/PCT	2.7/ 1/ .0473	14.3/ 14/ .0490	14.4/ 14/ .0494	14.4/ 14/ .0494
NOX SAMPLE METER/RANGE/PPM	27.7/ 1/ 7.0	2.2/ 1/ .6	13.7/ 1/ 3.5	1.8/ 1/ .5
NOX BCKGRD METER/RANGE/PPM	.8/ 1/ .2	.5/ 1/ .1	.4/ 1/ .1	.5/ 1/ .1
DILUTION FACTOR	10.38	16.81	12.20	17.04
THC CONCENTRATION PPM	3.	0.	2.	0.
CO CONCENTRATION PPM	25.	1.	54.	2.
CO2 CONCENTRATION PCT	1.1014	.6614	.9244	.6514
NOX CONCENTRATION PPM	6.8	.5	3.4	.4
THC MASS GRAMS	.28	.07	.17	.07
CO MASS GRAMS	2.21	.17	4.79	.35
CO2 MASS GRAMS	1531.9	1583.3	1286.9	1561.1
NOX MASS GRAMS	.91	.11	.46	.08
THC GRAMS/MI	.08	.02	.05	.02
CO GRAMS/MI	.62	.04	1.34	.09
CO2 GRAMS/MI	431.3	411.4	361.0	403.5
NOX GRAMS/MI	.26	.03	.13	.02
FUEL ECONOMY IN MPG	11.00 11.28	11.56	13.09 12.37	11.78
RUN TIME SECONDS	505.	867.	505.	868.
MEASURED DISTANCE MI	3.55 7.40	3.85	3.56 7.43	3.87
SCF, DRY	.965 .970	.973	.968 .971	.973
DFC, WET (DRY)	.927(.913)		.933(.919)	
TOT VOL (SCM) / SAM BLR (SCM)	206.7/ .00		206.9/ .00	

MPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER	C2HCOK-01	CARBON DIOXIDE	G/MI	401.7 (399.4)
BAROMETER	MM HG 746.3	FUEL ECONOMY	MPG	11.81 (11.88)
HUMIDITY	G/KG 8.2	HYDROCARBONS (THC)	G/MI	.04 (.04)
TEMPERATURE	DEG C 22.8	CARBON MONOXIDE	G/MI	.52 (.53)
		OXIDES OF NITROGEN	G/MI	.10 (.10)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C2HCOK-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 745.74 MM HG(29.36 IN HG)
ELATIVE HUMIDITY 49. PCT
AG RESULTS

VEHICLE NO.934
DATE 11/11/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 8.0 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1179-F
ODOMETER 5222. KM(3245. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .92

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		61305.
TOT FLOW STD. CU. METRES(SCF)		115.2 (4066.)
THC SAMPLE METER/RANGE/PPM		9.6/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		8.5/ 2/ 8.
CO SAMPLE METER/RANGE/PPM		26.8/ 12/ 27.
CO BCKGRD METER/RANGE/PPM		.5/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		72.1/ 1/1.3328
CO2 BCKGRD METER/RANGE/PCT		2.8/ 1/ .0490
NOX SAMPLE METER/RANGE/PPM		7.0/ 1/ 1.8
NOX BCKGRD METER/RANGE/PPM		.4/ 1/ .1
DILUTION FACTOR		8.91
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		25.
CO2 CONCENTRATION PCT		1.2893
NOX CONCENTRATION PPM		1.7
THC MASS GRAMS		.27
CO MASS GRAMS		3.33
CO2 MASS GRAMS		2718.3
NOX MASS GRAMS		.35
RUN TIME	SECONDS	766.
DFC, WET (DRY)		.888 (.874)
SCF, WET (DRY)		1.000 (.961)
VOL (SCM)		115.2
SAM BLR (SCM)		.00
MI (MEASURED)		10.19
TEST NUMBER,		C2HCOK-01
BAROMETER,	MM HG	745.7
HUMIDITY,	G/KG	8.0
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	266.7
FUEL ECONOMY,	MPG	17.8
HYDROCARBONS, (THC)	G/MI	.03
CARBON MONOXIDE,	G/MI	.33
OXIDES OF NITROGEN,	G/MI	.03

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-3734-001

EST NO. C2HCOK-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

AROMETER 745.24 MM HG(29.34 IN HG)
ELATIVE HUMIDITY 46. PCT
AG RESULTS

VEHICLE NO.934
DATE 11/11/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 7.8 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1179-F
ODOMETER 5240. KM(3256. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .91

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		47827.
TOT FLOW STD. CU. METRES(SCF)		89.8 (3171.)
THC SAMPLE METER/RANGE/PPM		9.2/ 2/ 9.
THC BCKGRD METER/RANGE/PPM		8.9/ 2/ 9.
CO SAMPLE METER/RANGE/PPM		9.4/ 12/ 9.
CO BCKGRD METER/RANGE/PPM		.3/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		75.3/ 14/ .5790
CO2 BCKGRD METER/RANGE/PCT		14.4/ 14/ .0494
NOX SAMPLE METER/RANGE/PPM		.4/ 1/ .1
NOX BCKGRD METER/RANGE/PPM		.3/ 1/ .1
DILUTION FACTOR		20.51
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		9.
CO2 CONCENTRATION PCT		.5320
NOX CONCENTRATION PPM		.0
THC MASS GRAMS		.08
CO MASS GRAMS		.93
CO2 MASS GRAMS		874.9
NOX MASS GRAMS		.00
RUN TIME	SECONDS	592.
DFC, WET (DRY)		.951 (.937)
SCF, WET (DRY)		1.000 (.975)
VOL (SCM)		89.8
SAM BLR (SCM)		.00
MI (MEASURED)		1.19
TEST NUMBER,		C2HCOK-01
BAROMETER,	MM HG	745.2
HUMIDITY,	G/KG	7.8
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	736.7
FUEL ECONOMY,	MPG	6.4
HYDROCARBONS, (THC)	G/MI	.06
CARBON MONOXIDE,	G/MI	.78
OXIDES OF NITROGEN,	G/MI	.00

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PROJECT 08-3734-001

TEST NO. C2HCOK-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 11/12/91
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-1179-F
ODOMETER 5245. KM(3259. MILES)

BAROMETER 749.05 MM HG(29.49 IN HG)
RELATIVE HUMIDITY 43. PCT

DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 7.5 GM/KG

NOX HUMIDITY CORRECTION FACTOR .90

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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)	42.2 (108.0)	40.0 (104.0)	42.2 (108.0)	40.6 (105.0)
BLOWER REVOLUTIONS	40540.	69382.	40466.	69445.
TOT FLOW STD. CU. METRES(SCF)	76.5 (2702.)	131.5 (4644.)	76.4 (2697.)	131.5 (4643.)
THC SAMPLE METER/RANGE/PPM	10.7/ 2/ 11.	8.3/ 2/ 8.	9.4/ 2/ 9.	9.0/ 2/ 9.
THC BCKGRD METER/RANGE/PPM	8.3/ 2/ 8.	8.7/ 2/ 9.	8.7/ 2/ 9.	9.4/ 2/ 9.
CO SAMPLE METER/RANGE/PPM	32.3/ 12/ 32.	1.3/ 12/ 1.	31.6/ 12/ 31.	4.8/ 12/ 5.
CO BCKGRD METER/RANGE/PPM	.9/ 12/ 1.	.9/ 12/ 1.	.6/ 12/ 1.	1.0/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT	60.9/ 1/1.1276	81.6/ 14/ .6884	93.5/ 14/ .9562	81.4/ 14/ .6846
CO2 BCKGRD METER/RANGE/PCT	2.7/ 1/ .0473	13.3/ 14/ .0450	13.5/ 14/ .0458	13.8/ 14/ .0470
NOX SAMPLE METER/RANGE/PPM	26.3/ 1/ 6.7	2.7/ 1/ .7	20.0/ 1/ 5.1	.7/ 1/ .2
NOX BCKGRD METER/RANGE/PPM	1.2/ 1/ .3	.7/ 1/ .2	.7/ 1/ .2	.4/ 1/ .1
DILUTION FACTOR	10.52	17.28	12.41	17.36
THC CONCENTRATION PPM	3.	0.	1.	0.
CO CONCENTRATION PPM	30.	0.	30.	4.
CO2 CONCENTRATION PCT	1.0848	.6460	.9141	.6403
NOX CONCENTRATION PPM	6.4	.5	4.9	.1
THC MASS GRAMS	.28	.02	.12	.02
CO MASS GRAMS	2.66	.07	2.64	.57
CO2 MASS GRAMS	1520.1	1555.4	1278.5	1541.7
NOX MASS GRAMS	.84	.12	.65	.02
THC GRAMS/MI	.08	.00	.03	.01
CO GRAMS/MI	.75	.02	.74	.15
CO2 GRAMS/MI	428.6	406.5	358.2	399.6
NOX GRAMS/MI	.24	.03	.18	.01
FUEL ECONOMY IN MPG	11.06	11.38	11.70	13.23 12.50 11.89
RUN TIME SECONDS	506.		867.	505. 867.
MEASURED DISTANCE MI	3.55	7.37	3.83	3.57 7.43 3.86
SCF, DRY	.966	.971	.974	.969 .972 .974
DPC, WET (DRY)		.928(.916)		.934(.921)
TOT VOL (SCM) / SAM BLR (SCM)		208.0/ .00		207.9/ .00

COMPOSITE RESULTS

TEST NUMBER		C2HCOK-02
BAROMETER	MM HG	749.0
HUMIDITY	G/KG	7.5
TEMPERATURE	DEG C	22.8

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	397.8	(395.8)
FUEL ECONOMY	MPG	11.93	(11.99)
HYDROCARBONS (THC)	G/MI	.03	(.03)
CARBON MONOXIDE	G/MI	.37	(.41)
OXIDES OF NITROGEN	G/MI	.12	(.11)

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PROJECT 08-3734-001

TEST NO. C2HCOK-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 748.28 MM HG(29.46 IN HG)
RELATIVE HUMIDITY 40. PCT
BAG RESULTS

VEHICLE NO.934
DATE 11/12/91
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.3 DEG C(74.0 DEG F)
ABS. HUMIDITY 7.3 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GASOLINE EM-1179-F
ODOMETER 5269. KM(3274. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .90

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		61299.
TOT FLOW STD. CU. METRES(SCF)		115.6 (4081.)
THC SAMPLE METER/RANGE/PPM		10.4/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		9.7/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		28.0/ 12/ 28.
CO BCKGRD METER/RANGE/PPM		.9/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		71.8/ 1/1.3273
CO2 BCKGRD METER/RANGE/PCT		2.8/ 1/ .0490
NOX SAMPLE METER/RANGE/PPM		6.8/ 1/ 1.8
NOX BCKGRD METER/RANGE/PPM		.4/ 1/ .1
DILUTION FACTOR		8.95
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		26.
CO2 CONCENTRATION PCT		1.2837
NOX CONCENTRATION PPM		1.7
THC MASS GRAMS		.24
CO MASS GRAMS		3.46
CO2 MASS GRAMS		2716.6
NOX MASS GRAMS		.33
RUN TIME	SECONDS	766.
DPC, WET (DRY)		.888 (.877)
SCF, WET (DRY)		1.000 (.964)
VOL (SCM)		115.6
SAM BLR (SCM)		.00
MI (MEASURED)		10.20
TEST NUMBER,		C2HCOK-02
BAROMETER,	MM HG	748.3
HUMIDITY,	G/KG	7.3
TEMPERATURE,	DEG C	23.3
CARBON DIOXIDE,	G/MI	266.4
FUEL ECONOMY,	MPG	17.8
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.34
OXIDES OF NITROGEN,	G/MI	.03

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PROJECT 08-3734-001

ST NO. C2HCOK-02 RUN	VEHICLE NO.934	TEST WEIGHT 1417. KG(3125. LBS)
HICLE MODEL 89 CORSICA	DATE 11/12/91	ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
GINE 2.8 L(171. CID) V-6	BAG CART NO. 2	GASOLINE EM-1179-F
ANSMISSION A3	DYNO NO. 3	ODOMETER 5285. KM(3284. MILES)
	CVS NO. 2	C = .436 H = .128 O = .437
ROMETER 748.03 MM HG(29.45 IN HG)	DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)	FUEL DENSITY = 6.57
LATIVE HUMIDITY 41. PCT	ABS. HUMIDITY 6.8 GM/KG	NOX HUMIDITY CORRECTION FACTOR .88

G RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.2 (108.0)
BLOWER REVOLUTIONS		47732.
TOT FLOW STD. CU. METRES(SCF)		90.0 (3177.)
THC SAMPLE METER/RANGE/PPM		10.3/ 2/ 10.
THC BCKGRD METER/RANGE/PPM		9.9/ 2/ 10.
CO SAMPLE METER/RANGE/PPM		15.6/ 12/ 16.
CO BCKGRD METER/RANGE/PPM		.8/ 12/ 1.
CO2 SAMPLE METER/RANGE/PCT		73.8/ 14/ .5555
CO2 BCKGRD METER/RANGE/PCT		14.1/ 14/ .0482
NOX SAMPLE METER/RANGE/PPM		.7/ 1/ .2
NOX BCKGRD METER/RANGE/PPM		.0/ 1/ .0
DILUTION FACTOR		21.35
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		14.
CO2 CONCENTRATION PCT		.5095
NOX CONCENTRATION PPM		.2
THC MASS GRAMS		.09
CO MASS GRAMS		1.51
CO2 MASS GRAMS		839.3
NOX MASS GRAMS		.03
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.953 (.940)
SCF, WET (DRY)		1.000 (.977)
VOL (SCM)		90.0
SAM BLR (SCM)		.00
MI (MEASURED)		1.15

TEST NUMBER,		C3HCOK-02
BAROMETER,	MM HG	748.0
HUMIDITY,	G/KG	6.8
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	728.8
FUEL ECONOMY,	MPG	6.5
HYDROCARBONS, (THC)	G/MI	.08
CARBON MONOXIDE,	G/MI	1.31
OXIDES OF NITROGEN,	G/MI	.02

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

EST NO. C2HC2K-01 RUN
EHICLE MODEL 89 CORSICA
NGINE 2.8 L(171. CID) V-6
RANSMISSION A3

VEHICLE NO.934
DATE 1/ 9/92
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-1179-F
ODOMETER 8557. KM(5317. MILES)

AROMETER 745.24 MM HG(29.34 IN HG)
ELATIVE HUMIDITY 24. PCT

DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 3.9 GM/KG

NOX HUMIDITY CORRECTION FACTOR .82

AG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	736.6 (29.0)	736.6 (29.0)	736.6 (29.0)	744.2 (29.3)
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)	42.8 (109.0)	39.4 (103.0)	41.1 (106.0)	39.4 (103.0)
BLOWER REVOLUTIONS	40495.	69521.	40482.	69487.
TOT FLOW STD. CU. METRES(SCF)	75.9 (2679.)	131.1 (4628.)	76.1 (2686.)	130.9 (4623.)
THC SAMPLE METER/RANGE/PPM	10.8/ 2/ 11.	6.3/ 2/ 6.	7.2/ 2/ 7.	6.0/ 2/ 6.
THC BCKGRD METER/RANGE/PPM	5.7/ 2/ 6.	6.1/ 2/ 6.	5.7/ 2/ 6.	5.8/ 2/ 6.
CO SAMPLE METER/RANGE/PPM	37.3/ 12/ 37.	5.6/ 12/ 6.	54.8/ 12/ 55.	7.4/ 12/ 7.
CO BCKGRD METER/RANGE/PPM	.1/ 12/ 0.	.2/ 12/ 0.	.0/ 12/ 0.	.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	61.5/ 1/1.1386	81.8/ 14/ .6922	93.5/ 14/ .9562	81.9/ 14/ .6941
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	12.4/ 14/ .0415	12.3/ 14/ .0411	12.4/ 14/ .0415
NOX SAMPLE METER/RANGE/PPM	43.3/ 1/ 10.8	2.3/ 1/ .6	23.4/ 1/ 5.9	2.3/ 1/ .6
NOX BCKGRD METER/RANGE/PPM	.4/ 1/ .1	.5/ 1/ .1	.3/ 1/ .1	.5/ 1/ .1
DILUTION FACTOR	10.42	17.18	12.38	17.13
THC CONCENTRATION PPM	6.	1.	2.	1.
CO CONCENTRATION PPM	36.	5.	53.	7.
CO2 CONCENTRATION PCT	1.0991	.6531	.9185	.6550
NOX CONCENTRATION PPM	10.7	.5	5.8	.5
THC MASS GRAMS	.49	.08	.17	.08
CO MASS GRAMS	3.14	.81	4.67	1.11
CO2 MASS GRAMS	1526.7	1567.3	1279.3	1570.2
NOX MASS GRAMS	1.27	.09	.69	.09
THC GRAMS/MI	.14	.02	.05	.02
CO GRAMS/MI	.88	.21	1.30	.28
CO2 GRAMS/MI	425.6	405.1	357.7	403.3
NOX GRAMS/MI	.35	.02	.19	.02
FUEL ECONOMY IN MPG	11.13 11.43	11.73	13.21 12.42	11.77
RUN TIME SECONDS	505.	867.	505.	867.
MEASURED DISTANCE MI	3.59 7.46	3.87	3.58 7.47	3.89
SCF, DRY	.972 .977	.980	.975 .978	.980
DFC, WET (DRY)	.928(.921)		.933(.926)	
TOT VOL (SCM) / SAM BLR (SCM)	206.9/ .00		207.0/ .00	

OMPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER	C2HC2K-01	CARBON DIOXIDE	G/MI	396.4 (395.9)
BAROMETER	MM HG 745.2	FUEL ECONOMY	MPG	11.96 (11.98)
HUMIDITY	G/KG 3.9	HYDROCARBONS (THC)	G/MI	.05 (.05)
TEMPERATURE	DEG C 21.7	CARBON MONOXIDE	G/MI	.65 (.67)
		OXIDES OF NITROGEN	G/MI	.14 (.14)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC2K-01 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 745.74 MM HG(29.36 IN HG)
RELATIVE HUMIDITY 23. PCT
BAG RESULTS

VEHICLE NO.934
DATE 1/ 9/92
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.8 DEG C(73.0 DEG F)
ABS. HUMIDITY 4.0 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 8581. KM(5332. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .82

TEST CYCLE	HFET
BLOWER DIF P MM. H2O(IN. H2O)	741.7 (29.2)
BLOWER INLET P MM. H2O(IN. H2O)	764.5 (30.1)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.3 (110.0)
BLOWER REVOLUTIONS	61300.
TOT FLOW STD. CU. METRES(SCF)	114.8 (4053.)
THC SAMPLE METER/RANGE/PPM	6.9/ 2/ 7.
THC BCKGRD METER/RANGE/PPM	5.7/ 2/ 6.
CO SAMPLE METER/RANGE/PPM	38.0/ 12/ 38.
CO BCKGRD METER/RANGE/PPM	.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	71.1/ 1/1.3144
CO2 BCKGRD METER/RANGE/PCT	2.4/ 1/ .0420
NOX SAMPLE METER/RANGE/PPM	19.3/ 1/ 4.8
NOX BCKGRD METER/RANGE/PPM	.5/ 1/ .1
DILUTION FACTOR	9.03
THC CONCENTRATION PPM	2.
CO CONCENTRATION PPM	36.
CO2 CONCENTRATION PCT	1.2771
NOX CONCENTRATION PPM	4.7
THC MASS GRAMS	.24
CO MASS GRAMS	4.83
CO2 MASS GRAMS	2683.5
NOX MASS GRAMS	.85
RUN TIME SECONDS	765.
DFC, WET (DRY)	.889 (.883)
SCF, WET (DRY)	1.000 (.970)
VOL (SCM)	114.8
SAM BLR (SCM)	.00
MI (MEASURED)	10.17
TEST NUMBER,	C2HC2K-01
BAROMETER, MM HG	745.7
HUMIDITY, G/KG	4.0
TEMPERATURE, DEG C	22.8
CARBON DIOXIDE, G/MI	263.9
FUEL ECONOMY, MPG	18.0
HYDROCARBONS, (THC) G/MI	.02
CARBON MONOXIDE, G/MI	.48
OXIDES OF NITROGEN, G/MI	.08

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC2K-01 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 745.74 MM HG(29.36 IN HG)
RELATIVE HUMIDITY 25. PCT

VEHICLE NO.934
DATE 1/ 9/92
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 22.2 DEG C(72.0 DEG F)
ABS. HUMIDITY 4.2 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 8597. KM(5342. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		764.5 (30.1)
BLOWER INLET P MM. H2O(IN. H2O)		744.2 (29.3)
BLOWER INLET TEMP. DEG. C(DEG. F)		41.7 (107.0)
BLOWER REVOLUTIONS		47756.
TOT FLOW STD. CU. METRES(SCF)		89.8 (3171.)
THC SAMPLE METER/RANGE/PPM		6.6/ 2/ 7.
THC BCKGRD METER/RANGE/PPM		5.6/ 2/ 6.
CO SAMPLE METER/RANGE/PPM		26.6/ 12/ 27.
CO BCKGRD METER/RANGE/PPM		.2/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.4/ 14/ .5648
CO2 BCKGRD METER/RANGE/PCT		12.4/ 14/ .0415
NOX SAMPLE METER/RANGE/PPM		1.4/ 1/ .4
NOX BCKGRD METER/RANGE/PPM		.7/ 1/ .2
DILUTION FACTOR		20.97
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		26.
CO2 CONCENTRATION PCT		.5253
NOX CONCENTRATION PPM		.2
THC MASS GRAMS		.13
CO MASS GRAMS		2.69
CO2 MASS GRAMS		863.7
NOX MASS GRAMS		.03
RUN TIME	SECONDS	596.
DFC, WET (DRY)		.952 (.945)
SCF, WET (DRY)		1.000 (.982)
VOL (SCM)		89.8
SAM BLR (SCM)		.00
MI (MEASURED)		1.14

TEST NUMBER,		C2HC2K-01
BAROMETER,	MM HG	745.7
HUMIDITY,	G/KG	4.2
TEMPERATURE,	DEG C	22.2
CARBON DIOXIDE,	G/MI	759.3
FUEL ECONOMY,	MPG	6.2
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	2.36
OXIDES OF NITROGEN,	G/MI	.02

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC2K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 1/10/92
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-1179-F
ODOMETER 8604. KM(5346. MILES)

BAROMETER 749.81 MM HG(29.52 IN HG)
RELATIVE HUMIDITY 26. PCT

DRY BULB TEMP. 21.1 DEG C(70.0 DEG F)
ABS. HUMIDITY 4.1 GM/KG

NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	749.3 (29.5)	749.3 (29.5)	749.3 (29.5)	749.3 (29.5)
BLOWER INLET P MM. H2O(IN. H2O)	764.5 (30.1)	764.5 (30.1)	767.1 (30.2)	767.1 (30.2)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.3 (110.0)	40.0 (104.0)	41.7 (107.0)	38.9 (102.0)
BLOWER REVOLUTIONS	40501.	69505.	40473.	69463.
TOT FLOW STD. CU. METRES(SCF)	76.3 (2693.)	131.7 (4650.)	76.4 (2698.)	131.9 (4656.)
THC SAMPLE METER/RANGE/PPM	11.4/ 2/ 11.	6.9/ 2/ 7.	7.3/ 2/ 7.	6.6/ 2/ 7.
THC BCKGRD METER/RANGE/PPM	6.6/ 2/ 7.	6.9/ 2/ 7.	6.0/ 2/ 6.	6.5/ 2/ 6.
CO SAMPLE METER/RANGE/PPM	33.5/ 12/ 33.	4.8/ 12/ 5.	52.8/ 12/ 53.	7.3/ 12/ 7.
CO BCKGRD METER/RANGE/PPM	1.8/ 12/ 2.	1.7/ 12/ 2.	1.2/ 12/ 1.	2.3/ 12/ 2.
CO2 SAMPLE METER/RANGE/PCT	62.1/ 1/1.1496	82.0/ 14/ .6960	93.5/ 14/ .9562	81.8/ 14/ .6922
CO2 BCKGRD METER/RANGE/PCT	2.4/ 1/ .0420	12.9/ 14/ .0434	12.6/ 14/ .0422	12.7/ 14/ .0426
NOX SAMPLE METER/RANGE/PPM	46.0/ 1/ 11.5	3.8/ 1/ 1.0	26.9/ 1/ 6.7	2.2/ 1/ .6
NOX BCKGRD METER/RANGE/PPM	.7/ 1/ .2	.8/ 1/ .2	.7/ 1/ .2	.8/ 1/ .2
DILUTION FACTOR	10.32	17.09	12.38	17.17
THC CONCENTRATION PPM	5.	0.	2.	0.
CO CONCENTRATION PPM	30.	3.	50.	5.
CO2 CONCENTRATION PCT	1.1117	.6551	.9174	.6520
NOX CONCENTRATION PPM	11.3	.8	6.6	.4
THC MASS GRAMS	.48	.06	.16	.07
CO MASS GRAMS	2.70	.48	4.41	.77
CO2 MASS GRAMS	1552.4	1579.5	1283.6	1574.0
NOX MASS GRAMS	1.36	.16	.79	.08
THC GRAMS/MI	.13	.02	.04	.02
CO GRAMS/MI	.75	.12	1.23	.20
CO2 GRAMS/MI	432.4	408.4	357.3	403.5
NOX GRAMS/MI	.38	.04	.22	.02
FUEL ECONOMY IN MPG	10.96 11.30	11.64	13.23 12.43	11.77
RUN TIME SECONDS	505.	867.	505.	867.
MEASURED DISTANCE MI	3.59 7.46	3.87	3.59 7.49	3.90
SCF, DRY	.971 .976	.979	.975 .978	.979
DFC, WET (DRY)	.927(.920)		.934(.926)	
TOT VOL (SCM) / SAM BLR (SCM)	208.0/ .00		208.3/ .00	

COMPOSITE RESULTS

TEST NUMBER		C2HC2K-02
BAROMETER	MM HG	749.8
HUMIDITY	G/KG	4.1
TEMPERATURE	DEG C	21.1

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	399.3	(398.0)
FUEL ECONOMY	MPG	11.88	(11.92)
HYDROCARBONS (THC)	G/MI	.05	(.05)
CARBON MONOXIDE	G/MI	.56	(.58)
OXIDES OF NITROGEN	G/MI	.16	(.15)

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HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC2K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 750.06 MM HG(29.53 IN HG)
RELATIVE HUMIDITY 26. PCT
BAG RESULTS

VEHICLE NO.934
DATE 1/10/92
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.1 DEG C(70.0 DEG F)
ABS. HUMIDITY 4.1 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 8628. KM(5361. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .82

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		749.3 (29.5)
BLOWER INLET P MM. H2O(IN. H2O)		767.1 (30.2)
BLOWER INLET TEMP. DEG. C(DEG. F)		42.8 (109.0)
BLOWER REVOLUTIONS		61323.
TOT FLOW STD. CU. METRES(SCF)		115.6 (4082.)
THC SAMPLE METER/RANGE/PPM		6.2/ 2/ 6.
THC BCKGRD METER/RANGE/PPM		5.6/ 2/ 6.
CO SAMPLE METER/RANGE/PPM		1.2/ 12/ 1.
CO BCKGRD METER/RANGE/PPM		.3/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		70.3/ 1/1.2997
CO2 BCKGRD METER/RANGE/PCT		2.3/ 1/ .0402
NOX SAMPLE METER/RANGE/PPM		46.2/ 1/ 11.5
NOX BCKGRD METER/RANGE/PPM		.5/ 1/ .1
DILUTION FACTOR		9.16
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		1.
CO2 CONCENTRATION PCT		1.2639
NOX CONCENTRATION PPM		11.4
THC MASS GRAMS		.16
CO MASS GRAMS		.12
CO2 MASS GRAMS		2675.0
NOX MASS GRAMS		2.07
RUN TIME	SECONDS	765.
DPC, WET (DRY)		.891 (.883)
SCF, WET (DRY)		1.000 (.969)
VOL (SCM)		115.6
SAM BLR (SCM)		.00
MI (MEASURED)		10.15
TEST NUMBER,		C2HC2K-02
BAROMETER,	MM HG	750.1
HUMIDITY,	G/KG	4.1
TEMPERATURE,	DEG C	21.1
CARBON DIOXIDE,	G/MI	263.5
FUEL ECONOMY,	MPG	18.0
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.01
OXIDES OF NITROGEN,	G/MI	.20

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC2K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 750.06 MM HG(29.53 IN HG)
RELATIVE HUMIDITY 24. PCT

VEHICLE NO.934
DATE 1/10/92
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 21.7 DEG C(71.0 DEG F)
ABS. HUMIDITY 3.9 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 8644. KM(5371. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		749.3 (29.5)
BLOWER INLET P MM. H2O(IN. H2O)		767.1 (30.2)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.3 (110.0)
BLOWER REVOLUTIONS		47836.
TOT FLOW STD. CU. METRES(SCF)		90.1 (3181.)
THC SAMPLE METER/RANGE/PPM		7.5/ 2/ 7.
THC BCKGRD METER/RANGE/PPM		6.6/ 2/ 7.
CO SAMPLE METER/RANGE/PPM		22.9/ 12/ 23.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.4/ 14/ .5648
CO2 BCKGRD METER/RANGE/PCT		12.2/ 14/ .0407
NOX SAMPLE METER/RANGE/PPM		1.8/ 1/ .5
NOX BCKGRD METER/RANGE/PPM		.7/ 1/ .2
DILUTION FACTOR		20.98
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		22.
CO2 CONCENTRATION PCT		.5260
NOX CONCENTRATION PPM		.3
THC MASS GRAMS		.13
CO MASS GRAMS		2.34
CO2 MASS GRAMS		867.6
NOX MASS GRAMS		.04
RUN TIME	SECONDS	597.
DFC, WET (DRY)		.952 (.945)
SCF, WET (DRY)		1.000 (.982)
VOL (SCM)		90.1
SAM BLR (SCM)		.00
MI (MEASURED)		1.15
TEST NUMBER,		C2HC2K-02
BAROMETER,	MM HG	750.1
HUMIDITY,	G/KG	3.9
TEMPERATURE,	DEG C	21.7
CARBON DIOXIDE,	G/MI	757.3
FUEL ECONOMY,	MPG	6.3
HYDROCARBONS, (THC)	G/MI	.11
CARBON MONOXIDE,	G/MI	2.04
OXIDES OF NITROGEN,	G/MI	.03

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
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PROJECT 08-2953-500

TEST NO. C2HC4K-01 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 2/25/92
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-1179-F
ODOMETER 12070. KM(7500. MILES)

BAROMETER 741.93 MM HG(29.21 IN HG)
RELATIVE HUMIDITY 30. 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. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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)	42.2 (108.0)	39.4 (103.0)	42.2 (108.0)	40.0 (104.0)
BLOWER REVOLUTIONS	40518.	69572.	40456.	69494.
TOT FLOW STD. CU. METRES(SCF)	75.7 (2673.)	130.6 (4613.)	75.6 (2668.)	130.3 (4603.)
THC SAMPLE METER/RANGE/PPM	12.8/ 2/ 13.	5.7/ 2/ 6.	7.0/ 2/ 7.	6.6/ 2/ 7.
THC BCKGRD METER/RANGE/PPM	5.4/ 2/ 5.	5.4/ 2/ 5.	5.0/ 2/ 5.	6.3/ 2/ 6.
CO SAMPLE METER/RANGE/PPM	48.2/ 12/ 48.	5.5/ 12/ 6.	47.7/ 12/ 47.	8.0/ 12/ 8.
CO BCKGRD METER/RANGE/PPM	.0/ 12/ 0.	.0/ 12/ 0.	.0/ 12/ 0.	.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	60.1/ 1/1.1130	81.1/ 14/ .6790	93.5/ 14/ .9562	81.7/ 14/ .6903
CO2 BCKGRD METER/RANGE/PCT	2.4/ 1/ .0420	12.3/ 14/ .0411	12.3/ 14/ .0411	12.3/ 14/ .0411
NOX SAMPLE METER/RANGE/PPM	40.3/ 1/ 10.1	1.7/ 1/ .4	25.5/ 1/ 6.4	2.6/ 1/ .7
NOX BCKGRD METER/RANGE/PPM	.6/ 1/ .2	.6/ 1/ .2	.6/ 1/ .2	.7/ 1/ .2
DILUTION FACTOR	10.65	17.51	12.39	17.22
THC CONCENTRATION PPM	8.	1.	2.	1.
CO CONCENTRATION PPM	46.	5.	46.	8.
CO2 CONCENTRATION PCT	1.0749	.6403	.9185	.6516
NOX CONCENTRATION PPM	9.9	.3	6.3	.5
THC MASS GRAMS	.69	.09	.21	.10
CO MASS GRAMS	4.05	.82	4.02	1.19
CO2 MASS GRAMS	1489.6	1531.5	1270.7	1555.0
NOX MASS GRAMS	1.23	.06	.77	.10
THC GRAMS/MI	.19	.02	.06	.03
CO GRAMS/MI	1.14	.21	1.14	.31
CO2 GRAMS/MI	419.5	399.8	359.8	406.8
NOX GRAMS/MI	.35	.02	.22	.03
FUEL ECONOMY IN MPG	11.28	11.88	13.15	11.67
RUN TIME SECONDS	505.	867.	505.	868.
MEASURED DISTANCE MI	3.55	3.83	3.53	3.82
SCF, DRY	.971	.978	.973	.978
DFC, WET (DRY)	11.58	.929(.920)	12.34	.934(.924)
TOT VOL (SCM) / SAM BLR (SCM)	7.38 / .976	206.3/ .00	7.35 / .976	205.9/ .00

COMPOSITE RESULTS

TEST NUMBER		C2HC4K-01
BAROMETER	MM HG	741.9
HUMIDITY	G/KG	5.5
TEMPERATURE	DEG C	23.3

		3-BAG	(4-BAG)
CARBON DIOXIDE	G/MI	392.9	(395.0)
FUEL ECONOMY	MPG	12.07	(12.00)
HYDROCARBONS (THC)	G/MI	.07	(.07)
CARBON MONOXIDE	G/MI	.66	(.69)
OXIDES OF NITROGEN	G/MI	.14	(.14)

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
HFET - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC4K-01 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 742.70 MM HG(29.24 IN HG)
RELATIVE HUMIDITY 27. PCT
BAG RESULTS

VEHICLE NO.934
DATE 2/25/92
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 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 12093. KM(7514. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .85

TEST CYCLE		HFET
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.9 (111.0)
BLOWER REVOLUTIONS		61220.
TOT FLOW STD. CU. METRES(SCF)		114.1 (4030.)
THC SAMPLE METER/RANGE/PPM		7.1/ 2/ 7.
THC BCKGRD METER/RANGE/PPM		6.3/ 2/ 6.
CO SAMPLE METER/RANGE/PPM		8.9/ 12/ 9.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		71.9/ 1/1.3291
CO2 BCKGRD METER/RANGE/PCT		2.4/ 1/ .0420
NOX SAMPLE METER/RANGE/PPM		23.2/ 1/ 5.8
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		8.95
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		9.
CO2 CONCENTRATION PCT		1.2918
NOX CONCENTRATION PPM		5.7
THC MASS GRAMS		.20
CO MASS GRAMS		1.14
CO2 MASS GRAMS		2699.6
NOX MASS GRAMS		1.06
RUN TIME	SECONDS	765.
DFC, WET (DRY)		.888 (.881)
SCF, WET (DRY)		1.000 (.968)
VOL (SCM)		114.1
SAM BLR (SCM)		.00
MI (MEASURED)		10.11
TEST NUMBER,		C2HC4K-01
BAROMETER,	MM HG	742.7
HUMIDITY,	G/KG	5.4
TEMPERATURE,	DEG C	25.0
CARBON DIOXIDE,	G/MI	267.1
FUEL ECONOMY,	MPG	17.8
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.11
OXIDES OF NITROGEN,	G/MI	.10

SOUTHWEST RESEARCH INSTITUTE - DEPARTMENT OF EMISSIONS RESEARCH
NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC4K-01 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 742.95 MM HG(29.25 IN HG)
RELATIVE HUMIDITY 28. PCT
BAG RESULTS

VEHICLE NO.934
DATE 2/25/92
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)
M85 EM-1179-F
ODOMETER 12109. KM(7524. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .86

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.9 (111.0)
BLOWER REVOLUTIONS		47865.
TOT FLOW STD. CU. METRES(SCF)		89.3 (3152.)
THC SAMPLE METER/RANGE/PPM		7.6/ 2/ 8.
THC BCKGRD METER/RANGE/PPM		6.8/ 2/ 7.
CO SAMPLE METER/RANGE/PPM		29.4/ 12/ 29.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.6/ 14/ .5679
CO2 BCKGRD METER/RANGE/PCT		12.5/ 14/ .0418
NOX SAMPLE METER/RANGE/PPM		4.2/ 1/ 1.1
NOX BCKGRD METER/RANGE/PPM		.6/ 1/ .2
DILUTION FACTOR		20.84
THC CONCENTRATION PPM		1.
CO CONCENTRATION PPM		29.
CO2 CONCENTRATION PCT		.5281
NOX CONCENTRATION PPM		.9
THC MASS GRAMS		.12
CO MASS GRAMS		2.97
CO2 MASS GRAMS		863.2
NOX MASS GRAMS		.13
RUN TIME	SECONDS	598.
DPC, WET (DRY)		.952 (.943)
SCF, WET (DRY)		1.000 (.981)
VOL (SCM)		89.3
SAM BLR (SCM)		.00
MI (MEASURED)		1.17
TEST NUMBER,		C2HC4K-01
BAROMETER,	MM HG	743.0
HUMIDITY,	G/KG	5.8
TEMPERATURE,	DEG C	25.6
CARBON DIOXIDE,	G/MI	740.7
FUEL ECONOMY,	MPG	6.4
HYDROCARBONS, (THC)	G/MI	.10
CARBON MONOXIDE,	G/MI	2.55
OXIDES OF NITROGEN,	G/MI	.11

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FTP - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC4K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

VEHICLE NO.934
DATE 2/26/92
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-1179-F
ODOMETER 12123. KM(7533. MILES)

BAROMETER 748.54 MM HG(29.47 IN HG)
RELATIVE HUMIDITY 21. PCT

DRY BULB TEMP. 25.0 DEG C(77.0 DEG F)
ABS. HUMIDITY 4.2 GM/KG

NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

BAG NUMBER	1	2	3	4
DESCRIPTION	COLD TRANSIENT	STABILIZED	HOT TRANSIENT	STABILIZED
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)	711.2 (28.0)
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)	43.3 (110.0)	39.4 (103.0)	43.3 (110.0)	41.1 (106.0)
BLOWER REVOLUTIONS	40569.	69582.	40522.	69505.
TOT FLOW STD. CU. METRES(SCF)	76.4 (2697.)	132.0 (4659.)	76.3 (2694.)	131.4 (4639.)
THC SAMPLE METER/RANGE/PPM	12.2/ 2/ 12.	6.5/ 2/ 6.	8.2/ 2/ 8.	7.1/ 2/ 7.
THC BCKGRD METER/RANGE/PPM	5.8/ 2/ 6.	6.3/ 2/ 6.	6.1/ 2/ 6.	6.7/ 2/ 7.
CO SAMPLE METER/RANGE/PPM	39.8/ 12/ 40.	4.3/ 12/ 4.	56.0/ 12/ 56.	9.8/ 12/ 10.
CO BCKGRD METER/RANGE/PPM	.2/ 12/ 0.	.7/ 12/ 1.	.0/ 12/ 0.	.2/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	60.5/ 1/1.1203	82.3/ 14/ .7017	94.5/ 14/ .9836	82.2/ 14/ .6998
CO2 BCKGRD METER/RANGE/PCT	2.5/ 1/ .0437	13.2/ 14/ .0446	13.3/ 14/ .0450	13.4/ 14/ .0454
NOX SAMPLE METER/RANGE/PPM	46.8/ 1/ 11.7	4.0/ 1/ 1.0	33.8/ 1/ 8.5	3.3/ 1/ .8
NOX BCKGRD METER/RANGE/PPM	1.8/ 1/ .5	1.7/ 1/ .4	1.2/ 1/ .3	1.1/ 1/ .3
DILUTION FACTOR	10.58	16.95	12.03	16.98
THC CONCENTRATION PPM	7.	1.	3.	1.
CO CONCENTRATION PPM	38.	4.	54.	9.
CO2 CONCENTRATION PCT	1.0807	.6597	.9424	.6571
NOX CONCENTRATION PPM	11.3	.6	8.2	.6
THC MASS GRAMS	.61	.09	.23	.12
CO MASS GRAMS	3.37	.55	4.78	1.44
CO2 MASS GRAMS	1511.3	1593.8	1316.3	1580.5
NOX MASS GRAMS	1.35	.13	.98	.12
THC GRAMS/MI	.17	.02	.06	.03
CO GRAMS/MI	.94	.14	1.34	.37
CO2 GRAMS/MI	423.4	413.0	369.8	411.0
NOX GRAMS/MI	.38	.03	.28	.03
FUEL ECONOMY IN MPG	11.18 11.35	11.51	12.78 12.11	11.55
RUN TIME SECONDS	505.	867.	505.	868.
MEASURED DISTANCE MI	3.57 7.43	3.86	3.56 7.40	3.85
SCF, DRY	.974 .978	.981	.976 .979	.981
DFC, WET (DRY)	.928(.922)		.932(.926)	
TOT VOL (SCM) / SAM BLR (SCM)	208.3/ .00		207.7/ .00	

COMPOSITE RESULTS

			3-BAG	(4-BAG)
TEST NUMBER		C2HC4K-02		
BAROMETER	MM HG	748.5		
HUMIDITY	G/KG	4.2		
TEMPERATURE	DEG C	25.0		
CARBON DIOXIDE	G/MI		403.3	(402.7)
FUEL ECONOMY	MPG		11.76	(11.77)
HYDROCARBONS (THC)	G/MI		.06	(.07)
CARBON MONOXIDE	G/MI		.64	(.71)
OXIDES OF NITROGEN	G/MI		.17	(.17)

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HFET - VEHICLE EMISSIONS RESULTS -
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TEST NO. C2HC4K-02 RUN	VEHICLE NO.934	TEST WEIGHT 1417. KG(3125. LBS)
VEHICLE MODEL 89 CORSICA	DATE 2/26/92	ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
ENGINE 2.8 L(171. CID) V-6	BAG CART NO. 2	M85 EM-1179-F
TRANSMISSION A3	DYNO NO. 3	ODOMETER 12146. KM(7547. MILES)
	CVS NO. 2	C = .436 H = .128 O = .437
BAROMETER 748.79 MM HG(29.48 IN HG)	DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)	FUEL DENSITY = 6.57
RELATIVE HUMIDITY 22. PCT	ABS. HUMIDITY 4.1 GM/KG	NOX HUMIDITY CORRECTION FACTOR .82

BAG RESULTS

TEST CYCLE	HFET
BLOWER DIF P MM. H2O(IN. H2O)	711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)	762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)	43.9 (111.0)
BLOWER REVOLUTIONS	61262.
TOT FLOW STD. CU. METRES(SCF)	115.3 (4070.)
THC SAMPLE METER/RANGE/PPM	7.3/ 2/ 7.
THC BCKGRD METER/RANGE/PPM	6.4/ 2/ 6.
CO SAMPLE METER/RANGE/PPM	18.4/ 12/ 18.
CO BCKGRD METER/RANGE/PPM	.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT	70.5/ 1/1.3034
CO2 BCKGRD METER/RANGE/PCT	2.6/ 1/ .0455
NOX SAMPLE METER/RANGE/PPM	16.4/ 1/ 4.1
NOX BCKGRD METER/RANGE/PPM	1.0/ 1/ .3
DILUTION FACTOR	9.12
THC CONCENTRATION PPM	2.
CO CONCENTRATION PPM	18.
CO2 CONCENTRATION PCT	1.2629
NOX CONCENTRATION PPM	3.9
THC MASS GRAMS	.21
CO MASS GRAMS	2.36
CO2 MASS GRAMS	2665.1
NOX MASS GRAMS	.70
RUN TIME SECONDS	765.
DFC, WET (DRY)	.890 (.884)
SCF, WET (DRY)	1.000 (.970)
VOL (SCM)	115.3
SAM BLR (SCM)	.00
MI (MEASURED)	10.13

TEST NUMBER,		C2HC4K-02
BAROMETER,	MM HG	748.8
HUMIDITY,	G/KG	4.1
TEMPERATURE,	DEG C	23.9
CARBON DIOXIDE,	G/MI	263.0
FUEL ECONOMY,	MPG	18.1
HYDROCARBONS, (THC)	G/MI	.02
CARBON MONOXIDE,	G/MI	.23
OXIDES OF NITROGEN,	G/MI	.07

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NYCC - VEHICLE EMISSIONS RESULTS -
PROJECT 08-2953-500

TEST NO. C2HC4K-02 RUN
VEHICLE MODEL 89 CORSICA
ENGINE 2.8 L(171. CID) V-6
TRANSMISSION A3

BAROMETER 749.05 MM HG(29.49 IN HG)
RELATIVE HUMIDITY 22. PCT
BAG RESULTS

VEHICLE NO.934
DATE 2/26/92
BAG CART NO. 2
DYNO NO. 3
CVS NO. 2
DRY BULB TEMP. 23.9 DEG C(75.0 DEG F)
ABS. HUMIDITY 4.1 GM/KG

TEST WEIGHT 1417. KG(3125. LBS)
ACTUAL ROAD LOAD 4.4 KW(5.9 HP)
M85 EM-1179-F
ODOMETER 12162. KM(7557. MILES)
C = .436 H = .128 O = .437
FUEL DENSITY = 6.57
NOX HUMIDITY CORRECTION FACTOR .82

TEST CYCLE		NYCC
BLOWER DIF P MM. H2O(IN. H2O)		711.2 (28.0)
BLOWER INLET P MM. H2O(IN. H2O)		762.0 (30.0)
BLOWER INLET TEMP. DEG. C(DEG. F)		43.9 (111.0)
BLOWER REVOLUTIONS		47923.
TOT FLOW STD. CU. METRES(SCF)		90.2 (3185.)
THC SAMPLE METER/RANGE/PPM		7.8/ 2/ 8.
THC BCKGRD METER/RANGE/PPM		6.5/ 2/ 6.
CO SAMPLE METER/RANGE/PPM		28.8/ 12/ 29.
CO BCKGRD METER/RANGE/PPM		.0/ 12/ 0.
CO2 SAMPLE METER/RANGE/PCT		74.1/ 14/ .5601
CO2 BCKGRD METER/RANGE/PCT		13.2/ 14/ .0446
NOX SAMPLE METER/RANGE/PPM		4.8/ 1/ 1.2
NOX BCKGRD METER/RANGE/PPM		1.4/ 1/ .4
DILUTION FACTOR		21.13
THC CONCENTRATION PPM		2.
CO CONCENTRATION PPM		28.
CO2 CONCENTRATION PCT		.5176
NOX CONCENTRATION PPM		.9
THC MASS GRAMS		.17
CO MASS GRAMS		2.95
CO2 MASS GRAMS		854.8
NOX MASS GRAMS		.12
RUN TIME	SECONDS	598.
DFC, WET (DRY)		.953 (.946)
SCF, WET (DRY)		1.000 (.983)
VOL (SCM)		90.2
SAM BLR (SCM)		.00
MI (MEASURED)		1.17
TEST NUMBER,		C2HC4K-02
BAROMETER,	MM HG	749.0
HUMIDITY,	G/KG	4.1
TEMPERATURE,	DEG C	23.9
CARBON DIOXIDE,	G/MI	731.7
FUEL ECONOMY,	MPG	6.5
HYDROCARBONS, (THC)	G/MI	.14
CARBON MONOXIDE,	G/MI	2.52
OXIDES OF NITROGEN,	G/MI	.11