

ATTACHMENT

-14-

The Effect of Vehicle Mileage Accumulation on Tested Fuel Economy

by

Kevin R. Tuckey

February 1981

Notice

This is a technical support report for regulatory action and it does not necessarily represent the final EPA decision on regulatory issues. They are intended to present a technical analysis of issues and recommendations resulting from the assumptions and constraints of that analysis. Agency policy constraints or data received subsequent to the date of release of this report may alter the recommendations reached. Readers are cautioned to seek the latest analysis from EPA before using the information contained herein.

Technical Support Section
Certification Policy and Support Branch
Office of Mobile Source Air Pollution Control
U.S. Environmental Protection Agency

Background

EPA currently accepts fuel economy test data generated by vehicles with up to 10,000 miles accumulation on the drivetrain system. These data and data generated near the standard 4,000-mile test point are all used in the calculation of fuel economy values for the fuel economy labels and the Corporate Average Fuel Economy (CAFE). The vehicles tested above the standard 4,000-mile test point tend to produce higher measured fuel economy values than they would at the 4,000-mile test point. This increase is perhaps due to the effect of vehicle break-in which reduces drivetrain friction. The higher measured fuel economy value tends to bias upward the fuel economy calculations for labeling and CAFE when compared to calculations using only data generated close to the standard test point. EPA is proposing to adjust test values back to the projected 4,000-mile level when the mileage accumulation at the test point significantly influences the measured fuel economy value. This document presents the derivation of the proposed adjustments.

Data

We have examined several previous studies of mileage effects on tested fuel economy values. All of these previous studies were based on either certification emission durability vehicles, tested to 50,000 miles, or data from in-use fleets of vehicles. The durability data includes only two test points, at 5,000 and 10,000 miles, within the allowable range of testing for fuel economy calculation data. The in-use data included the effects of different drivers, vehicle maintenance, weather, etc. These variables can effect measured fuel economy values as much or more than the increase in vehicle mileage, thus preventing an analysis of the data for mileage effects alone. Therefore, we judged the existing studies of mileage effects on fuel economy as inadequate for our purposes.

To perform our own study of the effect of mileage accumulation on measured fuel economy values, we used the actual data being submitted to EPA for fuel economy calculation, i.e., the emission certification and fuel economy data vehicles. We examined all data with valid and passing emission tests that could have been used for fuel economy calculations, even if that particular test had not been selected or needed for the fuel economy calculation.

These data were then grouped by subconfiguration (a unique combination of engine displacement, fuel system, transmission, engine calibration, axle ratio, test weight, and road-load horsepower). Those groups were sorted to find groups that contained at least one city/highway test pair at (or within 250 miles of) the standard 4,000-mile test point, and another city/highway test pair at a test point more than 4,000 miles. There were over 800 tests that met these criteria. Multiple tests were averaged to include all available data, thus minimizing lab-to-lab and test-to-test differences in these data. These averaged data were normalized to a ratio

This equation gives a maximum correction factor of 5.3 percent at 10,000 miles. For example, a vehicle tested at 10,000 miles with test results of 25.0 mpg city and 35.0 mpg highway would be adjusted to the 4,000-mile test point fuel economy with values of 23.7 and 33.2 mpg. The benefit of the increased mileage on these test results were thus estimated to be about 1.3 mpg in the city and 1.8 mpg in the highway value.

Attachments

ATTACHMENT I

Sources of the Data Points Used in the Analysis
Distribution by Manufacturer and Model Year

<u>Manufacturer</u>	<u>Model Year</u>					<u>Mfr. Total</u>
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	
AMC	--	4	--	--	12	16
Chrysler	--	8	8	26	32	74
Ford	4	36	46	64	40	190
GM	8	54	78	32	36	208
Fiat	--	--	8	4	--	12
Model Year Total	12	102	140	126	120	500

ATTACHMENT II

Regression Results

<u>Regression</u>	<u>Data</u>	<u>R. Coef.</u>	<u>Std. Error</u>	<u>Equation</u> ¹	<u>Correction Factors at Various Test Points</u> ²		
					<u>4000</u>	<u>6200</u>	<u>10000</u>
Linear	City	0.421	0.027	$-.969 + .820 \times 10^{-5} (m)$	1.0018	1.0198	1.0510
	Highway	0.407	0.030	$-.969 + .862 \times 10^{-5} (m)$	1.0035	1.0224	1.0552
	All	0.413	0.029	$-.969 + .842 \times 10^{-5} (m)$	1.0027	1.0212	1.0532
Logarythmic	City	0.427	0.027	$-.596 + .488 \times 10^{-1} (1n m)$	1.0007	1.0221	1.0455
	Highway	0.422	0.030	$-.566 + .526 \times 10^{-1} (1n m)$	1.0023	1.0253	1.0505
	All	0.424	0.028	$-.581 + .507 \times 10^{-1} (1n m)$	1.0015	1.0237	1.0480
2nd Order	City	0.429	0.027	$-.940 + .182 \times 10^{-4} (m) + -.795 \times 10^{-9} (m)^2$	1.0001	1.0223	1.0425
	Highway	0.439	0.029	$-.899 + .331 \times 10^{-4} (m) + -.195 \times 10^{-8} (m)^2$	1.0002	1.0293	1.0350
	All	0.432	0.028	$-.920 + .256 \times 10^{-4} (m) + -.138 \times 10^{-8} (m)^2$	1.0003	1.0257	1.0380
3rd Order	City	0.439	0.027	$-.764 + .109 \times 10^{-3} (m) + -.157 \times 10^{-7} (m)^2 + .770 \times 10^{-12} (m)^3$	0.9981	1.0198	1.0540
	Highway	0.440	0.029	$-.853 + .571 \times 10^{-4} (m) + -.587 \times 10^{-8} (m)^2 + .202 \times 10^{-12} (m)^3$	1.0004	1.0295	1.0390
	All	0.435	0.028	$-.808 + .832 \times 10^{-4} (m) + -.108 \times 10^{-7} (m)^2 + .485 \times 10^{-12} (m)^3$	0.9990	1.0243	1.0450

1. m = System miles accumulated prior to test point. For system kilometers, divide the kilometers by 1.609344 to get miles or adjust the multiplicative constants in the equations.
2. To find the percent increase, subtract one from the factor and multiply by 100. For example, linear correction factor at 10,000 miles = 1.0532 or 5.32 percent increase.

The following pages contain the data points used in this analysis. Each grouping of data contains the individual test result(s) for a given subconfiguration at a test point (separately for city and highway tests). The last line in each group, denoted by an indented manufacturer's name, contains the following:

- A. The harmonically averaged fuel economy value.
- B. The standard four thousand mile test points harmonically averaged fuel economy values (FE 4K).
- C. The ratio of (A) divided by (B).

The headings are defined as follows:

MFR - Manufacturer of the vehicle.

ACYR - Active model year the test point is used for.

K - Code number, unique for each subconfiguration. This number has been assigned by the computer to sort the groups but cannot be used to identify what parameters were unique to the subconfiguration.

TNUM - Test number, assigned by EPA.

TPRO - Test procedure: C:1 - City test cycle; H:2 - Highway test cycle.

ODO - Odometer, in miles, at the test point.

RWMG - Rounded miles per gallon at the test point.

TTYP - Test type: EM:1 - Emission data vehicle;
FE:2 - Fuel economy data vehicle.

CTD - Certification test disposition;

PCRT¹ - Passed emission standards, used for emission certification.

PNCT¹ - Passed emission standards, not used for emission certification.

FED - Fuel economy disposition;

USED² - Used for fuel economy calculations.

NTUS² - Not used for fuel economy calculations.

1. PCRT, PNCT--EPA uses only one test, coded PCRT, to issue on Emission Certificate of Conformity, the other tests that pass the emission standards but are not used are coded PNCT.

2. USED, NTUS--EPA is restricted in its selection of fuel economy data for use in fuel economy calculations. Data that is used in these calculations are coded USED, data that were not selected are coded NTUS.

MFR	ACYR	K	TNUM	TPPO	ODO	RWMG	TTYP	CTD	FED	INT#	VRSN	VID
FORD	77	358	771228	C : 1	3857.0	20.8	EM:1	PCRT	USED	157500		721-2.3-F-28
FORD	77	358	771207	C : 1	4232.0	21.5	EM:1	PCRT	USED	157400		7E1-2.3-F-28
----	FORD	77			4044.6	21.1	FE4K:	21.1	RATIO:	1.0000		
FORD	77	358	71502	C : 1	5233.0	22.5	FE:2	PNCT	USED	157400		7E1-2.3-F-28
----	FORD	77			5233.0	22.5	FE4K:	21.1	RATIO:	1.0841		
FORD	77	358	771202	HW:2	3818.8	28.2	EM:1	PNCT	USED	157500		721-2.3-F-28
FORD	77	358	771208	HW:2	4248.0	28.2	EM:1	PCRT	USED	157400		7E1-2.3-F-28
----	FORD	77			4081.4	28.2	FE4K:	28.2	RATIO:	1.0000		
FORD	77	358	71522	HW:2	5245.0	28.3	FE:2	PNCT	USED	157400		7E1-2.3-F-25
----	FORD	77			5245.0	28.3	FE4K:	28.2	RATIO:	1.0034		
GM	77	448	71528	C : 1	4217.0	24.5	FE:2	PNCT	NTUS	188603		7125C8
----	GM	77			4217.0	24.5	FE4K:	24.5	RATIO:	1.0000		
GM	77	448	71528	C : 1	4288.0	25.7	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	71527	C : 1	4366.0	25.0	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	71523	C : 1	4582.0	24.9	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	71524	C : 1	4611.0	24.2	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	773874	C : 1	4859.0	24.9	FE:2	PNCT	USED	188603		7125C8
GM	77	448	773787	C : 1	4702.0	24.7	FE:2	PNCT	USED	188603		7125C8
----	GM	77			4531.3	24.9	FE4K:	24.5	RATIO:	1.0180		
GM	77	448	71528	HW:2	4228.0	34.3	FE:2	PNCT	NTUS	188603		7125C8
----	GM	77			4228.0	34.3	FE4K:	34.3	RATIO:	1.0000		
GM	77	448	71530	HW:2	4299.0	35.4	FE:2	PNCT	USED	188603		7125C8
GM	77	448	71528	HW:2	4398.0	33.8	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	773975	HW:2	4670.0	34.3	FE:2	PNCT	NTUS	188603		7125C8
GM	77	448	773788	HW:2	4713.0	34.7	FE:2	PNCT	USED	188603		7125C8
----	GM	77			4520.0	34.5	FE4K:	34.3	RATIO:	1.0070		
GM	77	582	71735	C : 1	4129.0	12.0	FE:2	PNCT	NTUS	230501		733151
----	GM	77			4129.0	12.0	FE4K:	12.0	RATIO:	1.0000		
GM	77	582	773918	C : 1	4532.0	12.1	FE:2	PNCT	USED	230501		733151
----	GM	77			4532.0	12.1	FE4K:	12.0	RATIO:	1.0083		
GM	77	582	71735	HW:2	4140.0	17.2	FE:2	PNCT	USED	230501		733151
----	GM	77			4140.0	17.2	FE4K:	17.2	RATIO:	1.0000		
GM	77	582	773918	HW:2	4543.0	17.7	FE:2	PNCT	NTUS	230501		733151
----	GM	77			4543.0	17.7	FE4K:	17.2	RATIO:	1.0281		
AMC	78	949	80350	C : 1	3750.0	21.1	EM:1	PNCT	USED	278600		P74-215
AMC	78	949	781188	C : 1	3787.0	21.6	EM:1	PCRT	NTUS	278600		P74-215
----	AMC	78			3773.5	21.3	FE4K:	21.3	RATIO:	1.0000		
AMC	78	949	80108	C : 1	4710.0	20.5	EM:1	PNCT	USED	390100		D84-115
----	AMC	78			4710.0	20.5	FE4K:	21.3	RATIO:	0.9803		
AMC	78	949	781191	HW:2	3818.0	33.1	EM:1	PNCT	USED	278600		P74-215
----	AMC	78			3818.0	33.1	FE4K:	33.1	RATIO:	1.0000		
AMC	78	949	80111	HW:2	4721.0	32.2	EM:1	PNCT	USED	390100		D84-115
----	AMC	78			4721.0	32.2	FE4K:	33.1	RATIO:	0.9728		
CHRY	78	1068	82729	C : 1	3812.0	18.9	EM:1	PNCT	USED	362200		A213
----	CHRY	78			3812.0	18.9	FE4K:	18.9	RATIO:	1.0000		
CHRY	78	1068	785308	C : 1	4928.3	18.8	EM:1	PCRT	USED	363200		A243R
----	CHRY	78			4928.3	18.8	FE4K:	18.9	RATIO:	0.9941		
CHRY	78	1068	82730	HW:2	3823.0	21.5	EM:1	PNCT	USED	362200		A213
CHRY	78	1068	785250	HW:2	3883.7	23.0	EM:1	PNCT	NTUS	362200		A213
----	CHRY	78			3853.3	22.2	FE4K:	22.2	RATIO:	1.0000		
CHRY	78	1068	82728	HW:2	4879.0	20.5	EM:1	PNCT	NTUS	363200		A243R
CHRY	78	1068	785307	HW:2	4939.0	21.7	EM:1	PNCT	USED	363200		A243R
----	CHRY	78			4909.0	21.1	FE4K:	22.2	RATIO:	0.9486		
CHRY	78	1070	81424	C : 1	3873.0	18.5	EM:1	PNCT	USED	325700		A201
CHRY	78	1070	784024	C : 1	3973.4	18.4	EM:1	PCRT	NTUS	325700		A201
----	CHRY	78			3823.2	18.5	FE4K:	18.5	RATIO:	1.0000		
CHRY	78	1070	81651	C : 1	7688.0	14.0	EM:1	PNCT	NTUS	328200		A206R
CHRY	78	1070	783480	C : 1	7759.0	14.9	EM:1	PCRT	USED	328200		A206R
----	CHRY	78			7728.5	14.4	FE4K:	16.5	RATIO:	0.8749		
CHRY	78	1070	81425	HW:2	3884.0	25.8	EM:1	PNCT	USED	325700		A201
CHRY	78	1070	783928	HW:2	3992.0	25.3	EM:1	PNCT	NTUS	325700		A201
----	CHRY	78			3938.0	25.5	FE4K:	25.5	RATIO:	1.0000		
CHRY	78	1070	81652	HW:2	7709.0	22.5	EM:1	PNCT	USED	328200		A206R
CHRY	78	1070	783461	HW:2	7771.1	23.5	EM:1	PNCT	NTUS	328200		A206R
----	CHRY	78			7740.1	23.0	FE4K:	25.5	RATIO:	0.8999		
FORD	78	1117	81313	C : 1	3993.0	12.7	EM:1	PNCT	NTUS	315600		8L1-400-F-211
FORD	78	1117	783251	C : 1	4102.0	12.4	EM:1	PCRT	USED	315600		8L1-400-F-211
----	FORD	78			4047.5	12.5	FE4K:	12.5	RATIO:	1.0000		
FORD	78	1117	90284	C : 1	4742.0	11.9	EM:1	PNCT	NTUS	315600		8L1-400-F-211
----	FORD	78			4742.0	11.9	FE4K:	12.5	RATIO:	0.9483		
FORD	78	1117	81314	HW:2	4025.0	15.3	EM:1	PNCT	NTUS	315600		8L1-400-F-211
FORD	78	1117	783250	HW:2	4120.0	17.4	EM:1	PNCT	USED	315600		8L1-400-F-211
----	FORD	78			4072.5	18.3	FE4K:	18.3	RATIO:	1.0000		
FORD	78	1117	90285	HW:2	4753.0	17.4	EM:1	PNCT	NTUS	315600		8L1-400-F-211
----	FORD	78			4753.0	17.4	FE4K:	18.3	RATIO:	1.0686		
FORD	78	1122	82373	C : 1	3919.0	11.6	EM:1	PNCT	NTUS	324700		8A1-400-F-220
----	FORD	78			3919.0	11.6	FE4K:	11.6	RATIO:	1.0000		
FORD	78	1122	783189	C : 1	6051.0	12.2	EM:1	PCRT	USED	324700		8A1-400-F-220
----	FORD	78			6051.0	12.2	FE4K:	11.6	RATIO:	1.0517		
FORD	78	1122	82374	HW:2	3930.0	16.4	EM:1	PNCT	NTUS	324700		8A1-400-F-220
----	FORD	78			3930.0	16.4	FE4K:	16.4	RATIO:	1.0000		
FORD	78	1122	783188	HW:2	6089.8	16.9	EM:1	PNCT	USED	324700		8A1-400-F-220
----	FORD	78			6069.8	16.9	FE4K:	16.4	RATIO:	1.0305		
FORD	78	1136	80991	C : 1	3925.0	28.9	EM:1	PNCT	NTUS	301700		892-1.6-D-3
FORD	78	1136	782455	C : 1	3972.0	29.9	EM:1	PCRT	USED	301700		892-1.6-D-3
----	FORD	78			3948.5	29.4	FE4K:	29.4	RATIO:	1.0000		
FORD	78	1136	82235	C : 1	7195.0	28.6	FE:2	PNCT	USED	259202		892-1.6-C-8
----	FORD	78			7195.0	28.6	FE4K:	28.4	RATIO:	1.0071		
FORD	78	1136	80990	HW:2	3895.0	41.3	EM:1	PNCT	NTUS	301700		892-1.6-D-3
FORD	78	1136	782458	HW:2	3923.0	42.6	EM:1	PNCT	USED	301700		892-1.6-D-3
----	FORD	78			3939.0	41.9	FE4K:	41.9	RATIO:	1.0000		

MFR	ACYR	K	TRUM	TPRO	ODO	RWMG	TTYP	CTD	FED	INT#	VRSH	VID
GM	78	1353	82999	C : 1	3928.0	25.1	FE:2	PNCT	NTUS	338502		81W1-240F
----	GM	78			3938.0	25.1	FE4K:	25.1	RATIO:	1.0000		
GM	78	1353	83157	C : 1	4785.0	25.5	FE:2	PNCT	NTUS	322703		81W1-195F
GM	78	1353	788399	C : 1	4867.4	25.3	FE:2	PNCT	USED	322703		81W1-195F
----	GM	78			4831.2	25.4	FE4K:	25.1	RATIO:	1.0119		
GM	78	1353	788081	HW:2	4218.0	30.1	FE:2	PNCT	NTUS	338502		81W1-240F
GM	78	1353	83000	HW:2	4219.0	32.9	FE:2	PNCT	NTUS	338502		81W1-240F
----	GM	78			4218.5	31.4	FE4K:	31.4	RATIO:	1.0000		
GM	78	1353	83158	HW:2	4808.0	34.0	FE:2	PNCT	NTUS	322703		81W1-195F
GM	78	1353	788400	HW:2	4878.5	34.5	FE:2	PNCT	USED	322703		81W1-195F
----	GM	78			4842.3	34.2	FE4K:	31.4	RATIO:	1.0894		
GM	78	1378	82198	C : 1	4003.0	16.4	FE:2	PNCT	USED	304801		81Y2-141F
----	GM	78			4003.0	16.4	FE4K:	16.4	RATIO:	1.0000		
GM	78	1378	83208	C : 1	5747.0	16.3	FE:2	PNCT	USED	375702		81Y2-7X178F
----	GM	78			5747.0	16.3	FE4K:	16.4	RATIO:	0.9838		
GM	78	1378	82197	HW:2	4014.0	22.8	FE:2	PNCT	USED	304801		81Y2-141F
----	GM	78			4014.0	22.8	FE4K:	22.8	RATIO:	1.0000		
GM	78	1378	83209	HW:2	5759.0	23.3	FE:2	PNCT	USED	375702		81Y2-7X178F
----	GM	78			5759.0	23.3	FE4K:	22.8	RATIO:	1.0219		
GM	78	1392	81190	C : 1	3887.0	13.6	EM:1	PNCT	NTUS	307900		81Y2-146C
GM	78	1392	82484	C : 1	4193.0	13.8	EM:1	PCRT	USED	307901		81Y2-146C
----	GM	78			4040.0	13.8	FE4K:	13.8	RATIO:	1.0000		
GM	78	1392	90431	C : 1	4441.0	13.7	EM:1	PNCT	NTUS	307901		81Y2-146C
GM	78	1392	90434	C : 1	4482.0	13.8	EM:1	PNCT	NTUS	307901		81Y2-146C
GM	78	1392	90432	C : 1	4518.0	13.9	EM:1	PNCT	NTUS	307901		81Y2-146C
----	GM	78			4473.7	13.8	FE4K:	13.8	RATIO:	1.0147		
GM	78	1392	81191	HW:2	3928.0	20.8	EM:1	PNCT	USED	307900		81Y2-146C
----	GM	78			3928.0	20.8	FE4K:	20.8	RATIO:	1.0000		
GM	78	1392	82488	HW:2	4254.0	20.7	EM:1	PNCT	USED	307901		81Y2-146C
GM	78	1392	90433	HW:2	4529.0	20.7	EM:1	PNCT	NTUS	307901		81Y2-146C
----	GM	78			4391.5	20.7	FE4K:	20.8	RATIO:	0.9852		
GM	78	1517	81488	C : 1	3861.0	13.5	EM:1	PNCT	NTUS	331600		83M4-102F-1
GM	78	1517	783492	C : 1	3931.0	14.1	EM:1	PCRT	USED	331600		83M4-102F-1
----	GM	78			3898.0	13.8	FE4K:	13.8	RATIO:	1.0000		
GM	78	1517	783399	C : 1	4518.0	14.3	EM:1	PCRT	NTUS	281302		83M4-102F
----	GM	78			4518.0	14.3	FE4K:	13.8	RATIO:	1.0367		
GM	78	1517	81470	HW:2	3872.0	19.5	EM:1	PNCT	USED	331600		83M4-102F-1
GM	78	1517	783493	HW:2	3970.0	18.5	EM:1	PNCT	NTUS	331600		83M4-102F-1
GM	78	1517	81884	HW:2	4078.0	19.9	FE:2	PNCT	USED	331600		83M4-102F-1
GM	78	1517	81885	HW:2	4088.0	18.8	FE:2	PNCT	USED	331600		83M4-102F-1
----	GM	78			4004.5	19.4	FE4K:	19.4	RATIO:	1.0000		
GM	78	1517	783400	HW:2	4529.2	19.5	EM:1	PNCT	NTUS	281302		83M4-102F
----	GM	78			4529.2	19.5	FE4K:	19.4	RATIO:	1.0047		
GM	78	1540	91058	C : 1	3974.0	17.0	EM:1	PNCT	NTUS	434600		8482-48284F
GM	78	1540	782814	C : 1	4024.1	16.7	EM:1	PNCT	NTUS	434600		8482-48284F
----	GM	78			3999.0	16.8	FE4K:	16.8	RATIO:	1.0000		
GM	78	1540	783165	C : 1	4058.4	16.8	EM:1	PNCT	USED	434600		8482-48284F
----	GM	78			4058.4	16.8	FE4K:	16.8	RATIO:	0.9852		
GM	78	1540	782815	HW:2	4035.0	26.9	EM:1	PNCT	NTUS	434600		8482-48284F
----	GM	78			4035.0	26.9	FE4K:	26.9	RATIO:	1.0000		
GM	78	1540	782983	HW:2	4077.4	26.8	EM:1	PNCT	USED	434600		8482-48284F
----	GM	78			4077.4	26.8	FE4K:	26.9	RATIO:	0.9953		
GM	78	1564	93952	C : 1	4088.0	16.9	FE:2	PNCT	NTUS	386309		8482-3750F
----	GM	78			4088.0	16.9	FE4K:	16.9	RATIO:	1.0000		
GM	78	1564	93955	C : 1	4893.0	16.2	FE:2	PNCT	USED	386309		8482-3750F
----	GM	78			4893.0	16.2	FE4K:	16.9	RATIO:	0.9586		
GM	78	1564	93953	HW:2	4125.0	23.3	FE:2	PNCT	NTUS	386309		8482-3750F
----	GM	78			4125.0	23.3	FE4K:	23.3	RATIO:	1.0000		
GM	78	1564	93954	HW:2	4326.0	23.8	FE:2	PNCT	NTUS	386309		8482-3750F
GM	78	1564	94580	HW:2	4703.0	23.8	FE:2	PNCT	USED	386309		8482-3750F
----	GM	78			4514.5	23.7	FE4K:	23.3	RATIO:	1.0171		
GM	78	1583	81581	C : 1	3823.1	15.4	EM:1	PNCT	NTUS	338000		84E5-235F
GM	78	1583	783715	C : 1	3892.0	15.5	EM:1	PCRT	USED	338000		84E5-235F
----	GM	78			3857.5	15.4	FE4K:	15.4	RATIO:	1.0000		
GM	78	1583	82188	C : 1	4832.0	18.1	FE:2	PNCT	USED	353100		84E5-57118F
GM	78	1583	784852	C : 1	5147.8	18.8	FE:2	PNCT	NTUS	353100		84E5-57118F
----	GM	78			5039.9	16.3	FE4K:	15.4	RATIO:	1.0580		
GM	78	1583	81724	HW:2	3834.1	21.2	EM:1	PNCT	USED	338000		84E5-235F
GM	78	1583	783716	HW:2	3911.0	20.1	EM:1	PNCT	NTUS	338000		84E5-235F
----	GM	78			3872.5	20.6	FE4K:	20.6	RATIO:	1.0000		
GM	78	1583	82187	HW:2	4943.0	21.8	FE:2	PNCT	NTUS	353100		84E5-57118F
GM	78	1583	784853	HW:2	5186.0	22.4	FE:2	PNCT	USED	353100		84E5-57118F
----	GM	78			5054.5	22.1	FE4K:	20.6	RATIO:	1.0708		
GM	78	1593	80750	C : 1	3858.0	11.0	EM:1	PNCT	NTUS	294900		86JO-130C
GM	78	1593	782112	C : 1	3931.0	11.2	EM:1	PCRT	USED	294900		86JO-130C
----	GM	78			3893.5	11.1	FE4K:	11.1	RATIO:	1.0000		
GM	78	1593	82180	C : 1	9890.0	12.0	FE:2	PNCT	NTUS	340901		86JO-7023F
GM	78	1593	784848	C : 1	9832.0	12.2	FE:2	PNCT	USED	340901		86JO-7023F
----	GM	78			9761.0	12.1	FE4K:	11.1	RATIO:	1.0901		
GM	78	1593	80858	HW:2	3867.0	17.9	EM:1	PNCT	NTUS	294900		86JO-130C
GM	78	1593	782113	HW:2	3943.0	18.5	EM:1	PNCT	USED	294900		86JO-130C
----	GM	78			3908.0	18.2	FE4K:	18.2	RATIO:	1.0000		
GM	78	1593	82181	HW:2	9701.0	19.9	FE:2	PNCT	NTUS	340901		86JO-7023F
GM	78	1593	784847	HW:2	9843.0	19.8	FE:2	PNCT	USED	340901		86JO-7023F
----	GM	78			9772.0	19.8	FE4K:	18.2	RATIO:	1.0909		
GM	78	1595	80527	C : 1	3885.0	13.7	EM:1	PNCT	USED	283500		86JO-111F
GM	78	1595	781723	C : 1	3962.0	13.4	EM:1	PCRT	NTUS	283500		86JO-111F
GM	78	1595	81823	C : 1	4085.0	13.5	EM:1	PNCT	USED	283500		86JO-111F
----	GM	78			3970.7	13.5	FE4K:	13.5	RATIO:	1.0000		
GM	78	1595	81882	C : 1	9499.0	14.1	FE:2	PNCT	NTUS	340900		86JO-7023F
GM	78	1595	784008	C : 1	9596.0	13.8	FE:2	PNCT	USED	340900		86JO-7023F

MFR	ACFR	K	TNUM	TPRD	DDO	RWMC	TTYP	CTD	FED	INT#	YRSN	VID
FORD	79	2434	93224	C : 1	4119.0	19.0	FE:2	PNCT	NTUS	467703		981-3.3-F-138
----	FORD	79	2434		4119.0	19.0	FE4K:	19.0	RATIO:	1.0000		
FORD	79	2434	93083	C : 1	4509.0	17.2	FE:2	PNCT	NTUS	467703		981-3.3-F-138
FORD	79	2434	795388	C : 1	4558.3	18.4	FE:2	PNCT	USED	467703		981-3.3-F-138
----	FORD	79	2434		4533.8	17.8	FE4K:	19.0	RATIO:	0.9358		
FORD	79	2434	93225	HW:2	4130.0	28.8	FE:2	PNCT	NTUS	467703		981-3.3-F-138
----	FORD	79	2434		4130.0	28.8	FE4K:	28.8	RATIO:	1.0000		
FORD	79	2434	93084	HW:2	4453.0	24.6	FE:2	PNCT	NTUS	467703		981-3.3-F-138
FORD	79	2434	795370	HW:2	4569.2	25.0	FE:2	PNCT	USED	467703		981-3.3-F-138
----	FORD	79	2434		4511.1	24.8	FE4K:	26.6	RATIO:	0.9323		
FORD	79	2443	90897	C : 1	4001.0	17.3	EM:1	PNCT	NTUS	408800		9D1-4.1-F-146
FORD	79	2443	792178	C : 1	4145.0	17.1	EM:1	PCRT	USED	408800		9D1-4.1-F-146
----	FORD	79	2443		4073.0	17.2	FE4K:	17.2	RATIO:	1.0000		
FORD	79	2443	95487	C : 1	5781.0	17.8	FE:2	PNCT	USED	527404		9D1-4.1-H-405
FORD	79	2443	95470	C : 1	5835.0	17.7	FE:2	PNCT	USED	527404		9D1-4.1-H-405
FORD	79	2443	95471	C : 1	5874.0	17.9	FE:2	PNCT	USED	527404		9D1-4.1-H-405
----	FORD	79	2443		5823.3	17.7	FE4K:	17.2	RATIO:	1.0310		
FORD	79	2443	94371	C : 1	6492.0	17.9	FE:2	PNCT	NTUS	519200		9D1-4.1-H-147
FORD	79	2443	94373	C : 1	6839.0	17.9	FE:2	PNCT	NTUS	519200		9D1-4.1-H-147
FORD	79	2443	797867	C : 1	6702.0	17.8	FE:2	PNCT	USED	519200		9D1-4.1-H-147
----	FORD	79	2443		6811.0	17.9	FE4K:	17.2	RATIO:	1.0388		
FORD	79	2443	90698	HW:2	4013.0	23.1	EM:1	PNCT	NTUS	408800		9D1-4.1-F-146
FORD	79	2443	791808	HW:2	4113.0	22.8	EM:1	PNCT	USED	408800		9D1-4.1-F-146
----	FORD	79	2443		4083.0	22.9	FE4K:	22.9	RATIO:	1.0000		
FORD	79	2443	95488	HW:2	5772.0	24.5	FE:2	PNCT	USED	527404		9D1-4.1-H-405
FORD	79	2443	95489	HW:2	5807.0	24.6	FE:2	PNCT	USED	527404		9D1-4.1-H-405
FORD	79	2443	95472	HW:2	5885.0	24.1	FE:2	PNCT	USED	527404		9D1-4.1-H-405
----	FORD	79	2443		5821.3	24.4	FE4K:	22.9	RATIO:	1.0631		
FORD	79	2443	94372	HW:2	6512.0	24.3	FE:2	PNCT	NTUS	519200		9D1-4.1-H-147
FORD	79	2443	94374	HW:2	6850.0	24.7	FE:2	PNCT	NTUS	519200		9D1-4.1-H-147
FORD	79	2443	797817	HW:2	6712.7	24.0	FE:2	PNCT	USED	519200		9D1-4.1-H-147
----	FORD	79	2443		6824.9	24.3	FE4K:	22.9	RATIO:	1.0802		
FORD	79	2504	90738	C : 1	3863.0	14.8	EM:1	PNCT	NTUS	417500		9S1-5.0-F-153
FORD	79	2504	792502	C : 1	3967.7	14.2	EM:1	PCRT	USED	417500		9S1-5.0-F-153
----	FORD	79	2504		3915.3	14.4	FE4K:	14.4	RATIO:	1.0000		
FORD	79	2504	95293	C : 1	4704.0	14.2	FE:2	PNCT	USED	498902		9S1-5.0-G-327
FORD	79	2504	95286	C : 1	4744.0	14.5	FE:2	PNCT	USED	498902		9S1-5.0-G-327
----	FORD	79	2504		4724.0	14.3	FE4K:	14.4	RATIO:	0.9888		
FORD	79	2504	90739	HW:2	3844.0	21.0	EM:1	PNCT	NTUS	417500		9S1-5.0-F-153
FORD	79	2504	792187	HW:2	3928.0	20.2	EM:1	PNCT	USED	417500		9S1-5.0-F-153
----	FORD	79	2504		3888.0	20.6	FE4K:	20.6	RATIO:	1.0000		
FORD	79	2504	95292	HW:2	4675.0	21.3	FE:2	PNCT	USED	498902		9S1-5.0-G-327
FORD	79	2504	95294	HW:2	4715.0	20.8	FE:2	PNCT	USED	498902		9S1-5.0-G-327
----	FORD	79	2504		4695.0	21.0	FE4K:	20.6	RATIO:	1.0221		
FORD	79	2505	91049	C : 1	3858.0	14.8	EM:1	PNCT	NTUS	425200		9D1-5.0-F-256
FORD	79	2505	792766	C : 1	3914.8	14.7	EM:1	PCRT	USED	425200		9D1-5.0-F-256
----	FORD	79	2505		3888.4	14.7	FE4K:	14.7	RATIO:	1.0000		
FORD	79	2505	94750	C : 1	5088.0	14.0	EM:1	PNCT	NTUS	425204		9D1-5.0-F-256
FORD	79	2505	797782	C : 1	5198.0	14.8	EM:1	PCRT	USED	425204		9D1-5.0-F-256
----	FORD	79	2505		5142.0	14.4	FE4K:	14.7	RATIO:	0.9755		
FORD	79	2505	91050	HW:2	3803.0	21.8	EM:1	PNCT	NTUS	425200		9D1-5.0-F-256
FORD	79	2505	792765	HW:2	3925.9	20.4	EM:1	PNCT	USED	425200		9D1-5.0-F-256
----	FORD	79	2505		3884.4	21.0	FE4K:	21.0	RATIO:	1.0000		
FORD	79	2505	94885	HW:2	5108.0	20.8	EM:1	PNCT	NTUS	425204		9D1-5.0-F-256
FORD	79	2505	797781	HW:2	5208.8	20.7	EM:1	PNCT	USED	425204		9D1-5.0-F-256
----	FORD	79	2505		5157.4	20.8	FE4K:	21.0	RATIO:	0.9841		
FORD	79	2506	92935	C : 1	4099.0	15.1	FE:2	PNCT	NTUS	425202		9D1-5.0-F-256
FORD	79	2506	92937	C : 1	4139.0	15.5	FE:2	PNCT	NTUS	425202		9D1-5.0-F-256
----	FORD	79	2506		4118.0	15.3	FE4K:	15.3	RATIO:	1.0000		
FORD	79	2506	795889	C : 1	4989.7	14.9	FE:2	PNCT	USED	425202		9D1-5.0-F-256
----	FORD	79	2506		4989.7	14.9	FE4K:	15.3	RATIO:	0.9740		
FORD	79	2506	92936	HW:2	4110.0	22.5	FE:2	PNCT	NTUS	425202		9D1-5.0-F-256
FORD	79	2506	92938	HW:2	4158.0	22.7	FE:2	PNCT	NTUS	425202		9D1-5.0-F-256
----	FORD	79	2506		4134.0	22.6	FE4K:	22.6	RATIO:	1.0000		
FORD	79	2506	795870	HW:2	4980.7	24.7	FE:2	PNCT	USED	425202		9D1-5.0-F-256
FORD	79	2506	795138	HW:2	5009.2	20.8	FE:2	PNCT	USED	425202		9D1-5.0-F-256
----	FORD	79	2506		4994.9	22.5	FE4K:	22.6	RATIO:	0.9940		
FORD	79	2519	91090	C : 1	3895.0	13.0	EM:1	PNCT	USED	434500		9S1-5.8M-F-195
FORD	79	2519	792806	C : 1	3964.0	13.5	EM:1	PCRT	NTUS	434500		9S1-5.8M-F-195
----	FORD	79	2519		3929.5	13.2	FE4K:	13.2	RATIO:	1.0000		
FORD	79	2519	93792	C : 1	5809.0	13.0	FE:2	PNCT	USED	493900		9W1-5.8M-H-193
FORD	79	2519	93794	C : 1	5885.0	12.9	FE:2	PNCT	USED	493900		9W1-5.8M-H-193
----	FORD	79	2519		5847.0	12.9	FE4K:	13.2	RATIO:	0.9777		
FORD	79	2519	91151	HW:2	3906.0	19.2	EM:1	PNCT	NTUS	434500		9S1-5.8M-F-195
FORD	79	2519	792827	HW:2	3982.8	18.9	EM:1	PNCT	USED	434500		9S1-5.8M-F-195
----	FORD	79	2519		3944.4	19.0	FE4K:	19.0	RATIO:	1.0000		
FORD	79	2519	93791	HW:2	5780.0	19.9	FE:2	PNCT	USED	493900		9W1-5.8M-H-193
FORD	79	2519	93793	HW:2	5820.0	19.9	FE:2	PNCT	USED	493900		9W1-5.8M-H-193
----	FORD	79	2519		5800.0	19.8	FE4K:	19.0	RATIO:	1.0447		
FORD	79	2546	92972	C : 1	3878.0	13.5	FE:2	PNCT	USED	455300		9A1-5.8W-U-200
----	FORD	79	2546		3878.0	13.5	FE4K:	13.5	RATIO:	1.0000		
FORD	79	2546	94375	C : 1	5788.0	13.8	FE:2	PNCT	USED	519300		9M1-5.8W-H-407
FORD	79	2546	94377	C : 1	5827.0	14.1	FE:2	PNCT	USED	519300		9M1-5.8W-H-407
----	FORD	79	2546		5807.5	13.9	FE4K:	13.5	RATIO:	1.0332		
FORD	79	2546	92971	HW:2	4138.0	21.2	FE:2	PNCT	NTUS	455300		9A1-5.8W-U-200
FORD	79	2546	795352	HW:2	4216.6	19.6	FE:2	PNCT	USED	455300		9A1-5.8W-U-200
FORD	79	2546	795351	HW:2	4245.9	19.5	FE:2	PNCT	USED	455300		9A1-5.8W-U-200
----	FORD	79	2546		4200.2	20.1	FE4K:	20.1	RATIO:	1.0000		
FORD	79	2546	94378	HW:2	5799.0	20.1	FE:2	PNCT	USED	519300		9M1-5.8W-H-407
FORD	79	2546	94376	HW:2	5839.0	20.4	FE:2	PNCT	USED	519300		9M1-5.8W-H-407
----	FORD	79	2546		5819.0	20.2	FE4K:	20.1	RATIO:	1.0089		
GM	79	2598	91754	C : 1	3965.0	18.1	EM:1	PNCT	USED	427901		91GF85
GM	79	2598	92190	C : 1	3997.0	15.8	EM:1	PNCT	USED	427901		91GF85
----	GM	79	2598		3981.0	15.8	FE4K:	15.8	RATIO:	1.0000		

MFR	ACYR	K	TNUM	TPRO	ODD	RWMC	TTYP	CTD	FED	INT#	VRSN	VID
----	GM	79	2790		1	4050.0	20.2	FE4K: 20.2	RATIO: 1.0000			
	GM	79	2790	797480	C : 1	4652.0	19.9	FE:2 PNCT USED	443302			93JF105
----	GM	79	2790		1	4652.0	19.9	FE4K: 20.2	RATIO: 0.9881			
	GM	79	2790	94108	HW:2	4081.0	26.7	EM:1 PNCT USED	443302			93JF105
----	GM	79	2790		2	4081.0	26.7	FE4K: 26.7	RATIO: 1.0000			
	GM	79	2790	797308	HW:2	4694.0	27.6	FE:2 PNCT NTUS	443302			93JF105
----	GM	79	2790		2	4694.0	27.6	FE4K: 26.7	RATIO: 1.0337			
	GM	79	2798	90843	C : 1	3777.2	13.5	EM:1 PNCT NTUS	418300			93MC46
----	GM	79	2798	782379	C : 1	3849.0	13.5	EM:1 PCRT USED	418300			93MC46
	GM	79	2798		1	3813.1	13.5	FE4K: 13.5	RATIO: 1.0000			
	GM	79	2798	91738	C : 1	6088.0	13.9	FE:2 PNCT USED	469701			93M4-76619C
----	GM	79	2798		1	6088.0	13.9	FE4K: 13.5	RATIO: 1.0296			
	GM	79	2798	90844	HW:2	3788.0	19.1	EM:1 PNCT NTUS	418300			93MC46
----	GM	79	2798	782380	HW:2	3887.3	18.7	EM:1 PNCT USED	418300			93MC46
	GM	79	2798		2	3827.8	18.9	FE4K: 18.9	RATIO: 1.0000			
	GM	79	2798	91738	HW:2	6099.0	19.8	FE:2 PNCT USED	469701			93M4-76619C
----	GM	79	2798		2	6099.0	19.8	FE4K: 18.9	RATIO: 1.0477			
	GM	79	2801	91838	C : 1	3783.3	14.6	EM:1 PNCT NTUS	448000			93MF128
----	GM	79	2801	784001	C : 1	3857.9	14.4	EM:1 PCRT USED	448000			93MF128
	GM	79	2801		1	3820.8	14.5	FE4K: 14.5	RATIO: 1.0000			
	GM	79	2801	92837	C : 1	6217.0	15.9	FE:2 PNCT USED	469704			93M4-76619C
----	GM	79	2801		1	6217.0	15.9	FE4K: 14.5	RATIO: 1.0966			
	GM	79	2801	91838	HW:2	3795.1	19.9	EM:1 PNCT USED	448000			93MF128
----	GM	79	2801	784002	HW:2	3888.0	18.9	EM:1 PNCT NTUS	448000			93MF128
	GM	79	2801		2	3831.5	19.4	FE4K: 19.4	RATIO: 1.0000			
	GM	79	2801	92838	HW:2	6228.0	21.6	FE:2 PNCT USED	469704			93M4-76619C
----	GM	79	2801		2	6228.0	21.6	FE4K: 19.4	RATIO: 1.1141			
	GM	79	2840	91219	C : 1	3787.8	18.0	EM:1 PNCT NTUS	436800			94BF80
----	GM	79	2840	793184	C : 1	3858.1	17.8	EM:1 PCRT USED	436800			94BF80
	GM	79	2840		1	3812.9	17.9	FE4K: 17.9	RATIO: 1.0000			
	GM	79	2840	92480	C : 1	5541.0	19.4	FE:2 PNCT NTUS	472300			94B2-4671
----	GM	79	2840		1	5541.0	19.4	FE4K: 17.9	RATIO: 1.0838			
	GM	79	2840	91220	HW:2	3798.5	24.7	EM:1 PNCT USED	436800			94BF80
----	GM	79	2840	782981	HW:2	3889.0	23.2	EM:1 PNCT NTUS	436800			94BF80
	GM	79	2840		2	3833.8	23.9	FE4K: 23.9	RATIO: 1.0000			
	GM	79	2840	92481	HW:2	5559.0	23.8	FE:2 PNCT NTUS	472300			94B2-4671
----	GM	79	2840		2	5559.0	23.8	FE4K: 23.9	RATIO: 0.9947			
	GM	79	2848	795205	C : 1	4138.5	18.5	EM:1 PNCT USED	436802			94BF80
----	GM	79	2848		1	4138.5	18.5	FE4K: 18.5	RATIO: 1.0000			
	GM	79	2848	92705	C : 1	6082.0	19.5	FE:2 PNCT USED	472304			94B2-4671
----	GM	79	2848		1	6082.0	19.5	FE4K: 18.5	RATIO: 1.0541			
	GM	79	2848	795206	HW:2	4147.3	24.8	EM:1 PNCT USED	436802			94BF80
----	GM	79	2848		2	4147.3	24.8	FE4K: 24.6	RATIO: 1.0000			
	GM	79	2848	92706	HW:2	6093.0	27.4	FE:2 PNCT NTUS	472304			94B2-4671
----	GM	79	2848	795238	HW:2	6150.8	25.0	FE:2 PNCT USED	472304			94B2-4671
	GM	79	2848		2	6121.9	26.1	FE4K: 24.6	RATIO: 1.0628			
	GM	79	2859	92982	C : 1	3853.0	18.2	EM:1 PNCT NTUS	475700			94B2-58148
----	GM	79	2859		1	3853.0	18.2	FE4K: 18.2	RATIO: 1.0000			
	GM	79	2859	93847	C : 1	7321.0	18.0	FE:2 PNCT NTUS	475700			94B2-58148
----	GM	79	2859	796111	C : 1	7489.2	17.7	FE:2 PNCT USED	475700			94B2-58148
	GM	79	2859		1	7405.1	17.8	FE4K: 18.2	RATIO: 0.9807			
	GM	79	2859	92983	HW:2	3863.0	24.1	EM:1 PNCT NTUS	475700			94B2-58148
----	GM	79	2859		2	3863.0	24.1	FE4K: 24.1	RATIO: 1.0000			
	GM	79	2859	93848	HW:2	7332.0	23.9	FE:2 PNCT NTUS	475700			94B2-58148
----	GM	79	2859	796101	HW:2	7488.0	22.8	FE:2 PNCT USED	475700			94B2-58148
	GM	79	2859		2	7395.5	23.2	FE4K: 24.1	RATIO: 0.9640			
	GM	79	2859	91266	C : 1	3820.0	14.5	EM:1 PNCT NTUS	442600			94JF94
----	GM	79	2859	793336	C : 1	3894.3	14.7	EM:1 PCRT USED	442600			94JF94
	GM	79	2859		1	3857.1	14.6	FE4K: 14.6	RATIO: 1.0000			
	GM	79	2859	92095	C : 1	6410.0	16.1	FE:2 PNCT USED	466900			94J4-87116F
----	GM	79	2859		1	6410.0	16.1	FE4K: 14.6	RATIO: 1.1028			
	GM	79	2859	91267	HW:2	3831.5	21.4	EM:1 PNCT NTUS	442600			94JF94
----	GM	79	2859	793337	HW:2	3905.3	20.2	EM:1 PNCT USED	442600			94JF94
	GM	79	2859		2	3868.4	20.8	FE4K: 20.8	RATIO: 1.0000			
	GM	79	2859	92094	HW:2	6378.0	21.3	FE:2 PNCT USED	466900			94J4-87116F
----	GM	79	2859	92096	HW:2	6421.0	22.2	FE:2 PNCT USED	466900			94J4-87116F
	GM	79	2859		2	6395.5	21.7	FE4K: 20.8	RATIO: 1.0461			
	GM	79	2890	91262	C : 1	3877.2	14.9	EM:1 PNCT NTUS	440800			94JF89
----	GM	79	2890	793524	C : 1	4019.3	14.3	EM:1 PCRT USED	440800			94JF89
	GM	79	2890		1	3948.3	14.6	FE4K: 14.6	RATIO: 1.0000			
	GM	79	2890	92087	C : 1	6460.0	14.9	FE:2 PNCT NTUS	466901			94J4-87116F
----	GM	79	2890	92089	C : 1	6500.0	15.2	FE:2 PNCT NTUS	466901			94J4-87116F
	GM	79	2890	794671	C : 1	6563.8	14.8	FE:2 PNCT USED	466901			94J4-87116F
----	GM	79	2890		1	6507.9	15.0	FE4K: 14.6	RATIO: 1.0254			
	GM	79	2890	91263	HW:2	3913.5	20.1	EM:1 PNCT NTUS	440800			94JF89
----	GM	79	2890	793525	HW:2	4030.1	19.9	EM:1 PNCT USED	440800			94JF89
	GM	79	2890		2	3971.8	20.0	FE4K: 20.0	RATIO: 1.0000			
	GM	79	2890	92098	HW:2	6470.0	20.8	FE:2 PNCT NTUS	466901			94J4-87116F
----	GM	79	2890	92100	HW:2	6510.0	20.8	FE:2 PNCT NTUS	466901			94J4-87116F
	GM	79	2890	794872	HW:2	6581.0	20.0	FE:2 PNCT USED	466901			94J4-87116F
----	GM	79	2890		2	6520.3	20.5	FE4K: 20.0	RATIO: 1.0263			
	GM	79	2901	91348	C : 1	3777.0	13.1	EM:1 PNCT USED	443200			96JC117
----	GM	79	2901	793402	C : 1	3850.1	12.8	EM:1 PCRT NTUS	443200			96JC117
	GM	79	2901		1	3813.5	12.9	FE4K: 12.9	RATIO: 1.0000			
	GM	79	2901	92199	C : 1	9723.0	13.4	FE:2 PNCT USED	466800			96J0-8036C
----	GM	79	2901		1	9723.0	13.4	FE4K: 12.9	RATIO: 1.0349			
	GM	79	2901	91347	HW:2	3788.5	20.4	EM:1 PNCT NTUS	443200			96JC117
----	GM	79	2901	793713	HW:2	3800.8	20.1	EM:1 PNCT USED	443200			96JC117
	GM	79	2901		2	3844.8	20.2	FE4K: 20.2	RATIO: 1.0000			
	GM	79	2901	92200	HW:2	9735.0	20.9	FE:2 PNCT USED	466800			96J0-8036C

MFR	ACYR	K	TNUM	TPRO	ODO	RWMC	TTYP	CTD	FED	INT#	VRSN	VID
CHRY	80	3588	95328	HW:2	4838.0	17.1	EM:1	PNCT	USED	565107		C312
----	CHRY	80		2	4838.0	17.1	FE4K:	16.7		RATIO:	1.0241	
CHRY	80	3608	95452	C:1	3785.0	9.2	EM:1	PNCT	NTUS	542400		C308
CHRY	80	3608	798272	C:1	3878.8	9.4	EM:1	PCRT	USED	542400		C308
----	CHRY	80		1	3821.8	9.3	FE4K:	9.3		RATIO:	1.0000	
CHRY	80	3608	97309	C:1	4325.0	9.7	FE:2	PNCT	NTUS	542403		C308
CHRY	80	3608	798698	C:1	4551.0	9.8	FE:2	PNCT	USED	542403		C308
----	CHRY	80		1	4438.0	9.6	FE4K:	9.3		RATIO:	1.0323	
CHRY	80	3608	95453	HW:2	3776.0	11.3	EM:1	PNCT	USED	542400		C308
CHRY	80	3608	97528	HW:2	3992.0	12.1	EM:1	PNCT	USED	542400		C308
----	CHRY	80		2	3884.0	11.7	FE4K:	11.7		RATIO:	1.0000	
CHRY	80	3608	97310	HW:2	4337.0	12.8	FE:2	PNCT	NTUS	542403		C308
CHRY	80	3608	798697	HW:2	4582.0	12.7	FE:2	PNCT	USED	542403		C308
----	CHRY	80		2	4448.8	12.6	FE4K:	11.7		RATIO:	1.0824	
FORD	80	3880	98729	C:1	4027.0	16.5	EM:1	PCRT	USED	621801		081-2.3-C-248
FORD	80	3880	98984	C:1	4188.0	17.4	EM:1	PNCT	USED	621801		081-2.3-C-248
----	FORD	80		1	4107.8	16.9	FE4K:	16.9		RATIO:	1.0000	
FORD	80	3880	98731	C:1	4580.0	18.5	FE:2	PNCT	USED	601305		021-2.3-F-238
FORD	80	3880	98981	C:1	4638.0	18.5	FE:2	PNCT	USED	601305		021-2.3-F-238
----	FORD	80		1	4609.0	17.4	FE4K:	16.8		RATIO:	1.0288	
FORD	80	3880	98730	HW:2	4038.0	22.8	EM:1	PNCT	USED	621801		081-2.3-C-248
FORD	80	3880	98983	HW:2	4182.0	24.1	EM:1	PNCT	USED	621801		081-2.3-C-248
----	FORD	80		2	4100.0	23.4	FE4K:	23.4		RATIO:	1.0000	
FORD	80	3880	98728	HW:2	4552.0	23.9	FE:2	PNCT	USED	601305		021-2.3-F-238
FORD	80	3880	98982	HW:2	4648.0	23.2	FE:2	PNCT	USED	601305		021-2.3-F-238
----	FORD	80		2	4600.5	23.5	FE4K:	23.4		RATIO:	1.0048	
FORD	80	3727	97575	C:1	3782.0	16.8	EM:1	PNCT	NTUS	608700		0A1-5.0-F-328
FORD	80	3727	799865	C:1	3948.5	16.9	EM:1	PCRT	USED	608700		0A1-5.0-F-328
----	FORD	80		1	3885.3	16.7	FE4K:	16.7		RATIO:	1.0000	
FORD	80	3727	98024	C:1	5648.0	17.0	FE:2	PNCT	NTUS	619800		9M07
FORD	80	3727	98148	C:1	5730.0	17.1	FE:2	PNCT	USED	619800		9M07
----	FORD	80		1	5689.0	17.0	FE4K:	16.7		RATIO:	1.0211	
FORD	80	3727	98758	HW:2	3793.0	25.5	EM:1	PNCT	NTUS	608700		0A1-5.0-F-328
FORD	80	3727	799868	HW:2	3974.2	25.1	EM:1	PNCT	USED	608700		0A1-5.0-F-328
----	FORD	80		2	3883.8	25.3	FE4K:	25.3		RATIO:	1.0000	
FORD	80	3727	98025	HW:2	5892.0	26.8	FE:2	PNCT	NTUS	619800		9M07
FORD	80	3727	98147	HW:2	5741.0	26.1	FE:2	PNCT	USED	619800		9M07
----	FORD	80		2	5715.5	26.3	FE4K:	25.3		RATIO:	1.0415	
FORD	80	3743	99188	C:1	3759.0	15.9	EM:1	PNCT	NTUS	630000		0D1-4.2-D-311
FORD	80	3743	800831	C:1	3942.0	15.9	EM:1	PCRT	USED	630000		0D1-4.2-D-311
----	FORD	80		1	3850.8	15.9	FE4K:	15.9		RATIO:	1.0000	
FORD	80	3743	99103	C:1	4888.0	16.0	FE:2	PNCT	USED	614802		0S1-4.2-C-308
----	FORD	80		1	4888.0	16.0	FE4K:	15.9		RATIO:	1.0083	
FORD	80	3743	99189	HW:2	3770.0	20.1	EM:1	PNCT	USED	630000		0D1-4.2-D-311
FORD	80	3743	800732	HW:2	3952.9	19.8	EM:1	PNCT	NTUS	630000		0D1-4.2-D-311
----	FORD	80		2	3861.4	19.8	FE4K:	19.8		RATIO:	1.0000	
FORD	80	3743	99104	HW:2	4701.0	21.3	FE:2	PNCT	USED	614802		0S1-4.2-C-308
----	FORD	80		2	4701.0	21.3	FE4K:	19.8		RATIO:	1.0732	
FORD	80	3772	98980	C:1	4188.0	16.2	EM:1	PCRT	USED	571001		0A1-5.0-F-321
----	FORD	80		1	4188.0	16.2	FE4K:	16.2		RATIO:	1.0000	
FORD	80	3772	99788	C:1	4410.0	15.3	EM:1	PNCT	USED	571004		0A1-5.0-F-321
FORD	80	3772	802261	C:1	4777.0	16.8	EM:1	PCRT	NTUS	571004		0A1-5.0-F-321
----	FORD	80		1	4583.5	16.0	FE4K:	16.2		RATIO:	0.9888	
FORD	80	3772	98979	HW:2	4161.0	20.8	EM:1	PNCT	USED	571001		0A1-5.0-F-321
----	FORD	80		2	4161.0	20.8	FE4K:	20.8		RATIO:	1.0000	
FORD	80	3772	99832	HW:2	4421.0	20.3	EM:1	PNCT	NTUS	571004		0A1-5.0-F-321
FORD	80	3772	802262	HW:2	4787.7	21.3	EM:1	PNCT	USED	571004		0A1-5.0-F-321
----	FORD	80		2	4604.3	20.8	FE4K:	20.8		RATIO:	0.9994	
FORD	80	3787	94627	C:1	3832.0	16.8	EM:1	PNCT	NTUS	529900		0U2-4.9-F-558
FORD	80	3787	797810	C:1	3938.7	17.1	EM:1	PCRT	USED	529900		0U2-4.9-F-558
----	FORD	80		1	3884.3	16.8	FE4K:	16.8		RATIO:	1.0000	
FORD	80	3787	95861	C:1	8052.0	17.4	FE:2	PNCT	USED	561602		8U245
----	FORD	80		1	8052.0	17.4	FE4K:	16.8		RATIO:	1.0329	
FORD	80	3787	94628	HW:2	3880.0	22.6	EM:1	PNCT	USED	529900		0U2-4.9-F-558
FORD	80	3787	797811	HW:2	3955.0	21.7	EM:1	PNCT	NTUS	529900		0U2-4.9-F-558
----	FORD	80		2	3917.5	22.1	FE4K:	22.1		RATIO:	1.0000	
FORD	80	3787	95860	HW:2	7990.0	23.5	FE:2	PNCT	USED	561602		8U245
----	FORD	80		2	7990.0	23.5	FE4K:	22.1		RATIO:	1.0614	
FORD	80	3793	94826	C:1	3895.0	16.2	EM:1	PNCT	NTUS	529800		0F1-4.9-F-226
FORD	80	3793	797608	C:1	3884.1	16.2	EM:1	PCRT	USED	529800		0F1-4.9-F-226
FORD	80	3793	98357	C:1	4173.0	15.5	EM:1	PCRT	USED	529801		0F1-4.9-F-226
----	FORD	80		1	4010.7	16.0	FE4K:	16.0		RATIO:	1.0000	
FORD	80	3793	95793	C:1	6515.0	16.9	FE:2	PNCT	USED	563801		8F259
----	FORD	80		1	6515.0	16.9	FE4K:	16.0		RATIO:	1.0589	
FORD	80	3793	94825	HW:2	3905.0	20.0	EM:1	PNCT	NTUS	529800		0F1-4.9-F-226
FORD	80	3793	797809	HW:2	3888.0	19.9	EM:1	PNCT	USED	529800		0F1-4.9-F-226
FORD	80	3793	98358	HW:2	4184.0	20.2	EM:1	PNCT	USED	529801		0F1-4.9-F-226
----	FORD	80		2	4026.0	20.0	FE4K:	20.0		RATIO:	1.0000	
FORD	80	3793	95792	HW:2	6442.0	21.6	FE:2	PNCT	USED	563801		8F259
FORD	80	3793	96070	HW:2	6557.0	20.9	FE:2	PNCT	USED	563801		8F259
----	FORD	80		2	6489.5	21.2	FE4K:	20.0		RATIO:	1.0805	
FORD	80	3811	95161	C:1	3789.0	17.1	EM:1	PNCT	NTUS	553100		0F2-4.9-C-230
FORD	80	3811	798333	C:1	3889.0	17.0	EM:1	PCRT	USED	553100		0F2-4.9-C-230
----	FORD	80		1	3829.0	17.0	FE4K:	17.0		RATIO:	1.0000	
FORD	80	3811	95833	C:1	6249.0	17.4	FE:2	PNCT	USED	571700		0F2-4.9-E-760
----	FORD	80		1	6249.0	17.4	FE4K:	17.0		RATIO:	1.0205	
FORD	80	3811	95162	HW:2	3780.0	23.9	EM:1	PNCT	NTUS	553100		0F2-4.9-C-230
FORD	80	3811	798334	HW:2	3907.0	23.1	EM:1	PNCT	USED	553100		0F2-4.9-C-230
----	FORD	80		2	3843.5	23.5	FE4K:	23.5		RATIO:	1.0000	
FORD	80	3811	95834	HW:2	6280.0	25.0	FE:2	PNCT	NTUS	571700		0F2-4.9-E-760
FORD	80	3811	98269	HW:2	6348.0	23.7	FE:2	PNCT	USED	571700		0F2-4.9-E-760
----	FORD	80		2	6304.5	24.3	FE4K:	23.5		RATIO:	1.0357	

MFR	ACYR	K	TNUM	TPRO	ODD	RWMG	TTYP	CTD	FED	INT#	VRSN	VID
----	FORD	80	3883		2	3842.0	17.0	FE4K:	17.0	RATIO:	1.0000	
	FORD	80	3883	98858	HW:2	8432.0	17.1	FE:2	PNCT	USED	583804	0U1-S.8W-E-583
----	FORD	80	3883		2	8432.0	17.1	FE4K:	17.0	RATIO:	1.0058	
	GM	80	4018	98814	C:1	3807.0	14.8	EM:1	PNCT	USED	827500	C9F172A
----	GM	80	4018		1	3807.0	14.8	FE4K:	14.8	RATIO:	1.0000	
	GM	80	4018	99071	C:1	5883.0	14.8	EM:1	PNCT	USED	842700	COFO15
	GM	80	4018	801188	C:1	8088.4	14.0	EM:1	PCRT	NTUS	842700	COFO15
--	GM	80	4018		1	8018.7	14.2	FE4K:	14.8	RATIO:	0.8757	
	GM	80	4018	98815	HW:2	3918.0	22.8	EM:1	PNCT	USED	827500	C9F172A
	GM	80	4018	800598	HW:2	4018.8	23.1	EM:1	PNCT	NTUS	827500	C9F172A
----	GM	80	4018		2	3988.4	22.8	FE4K:	22.8	RATIO:	1.0000	
	GM	80	4018	99072	HW:2	5974.0	22.7	EM:1	PNCT	USED	842700	COFO15
	GM	80	4018	801125	HW:2	8038.4	21.3	EM:1	PNCT	NTUS	842700	COFO15
----	GM	80	4018		2	8008.2	22.0	FE4K:	22.8	RATIO:	0.9818	
	GM	80	4052	98116	C:1	4222.0	18.8	EM:1	PNCT	USED	580802	C9N383
----	GM	80	4052		1	4222.0	18.8	FE4K:	18.8	RATIO:	1.0000	
	GM	80	4052	98581	C:1	4537.0	18.1	EM:1	PCRT	USED	580803	C9N383
----	GM	80	4052		1	4537.0	18.1	FE4K:	18.8	RATIO:	0.9583	
	GM	80	4052	98117	HW:2	4233.0	24.7	EM:1	PNCT	USED	580802	C9N383
----	GM	80	4052		2	4233.0	24.7	FE4K:	24.7	RATIO:	1.0000	
	GM	80	4052	98582	HW:2	4547.0	24.8	EM:1	PNCT	USED	580803	C9N383
----	GM	80	4052		2	4547.0	24.8	FE4K:	24.7	RATIO:	1.0081	
	GM	80	4182	98170	C:1	4218.0	21.1	FE:2	PNCT	NTUS	588304	097428
----	GM	80	4182		1	4218.0	21.1	FE4K:	21.1	RATIO:	1.0000	
	GM	80	4182	19544	C:1	5724.0	20.9	FE:2	PNCT	USED	588304	097428
----	GM	80	4182		1	5724.0	20.9	FE4K:	21.1	RATIO:	0.9806	
	GM	80	4182	98171	HW:2	4227.0	31.8	FE:2	PNCT	NTUS	588304	097428
----	GM	80	4182		2	4227.0	31.8	FE4K:	31.8	RATIO:	1.0000	
	GM	80	4182	19543	HW:2	5888.0	31.3	FE:2	PNCT	USED	588304	097428
----	GM	80	4182		2	5888.0	31.3	FE4K:	31.8	RATIO:	0.9843	
	GM	80	4178	98138	C:1	4142.0	18.9	EM:1	PNCT	NTUS	552200	098847
	GM	80	4178	788814	C:1	4231.9	18.9	EM:1	PCRT	USED	552200	098847
----	GM	80	4178		1	4188.9	18.9	FE4K:	18.9	RATIO:	1.0000	
	GM	80	4178	99059	C:1	4848.0	18.8	EM:1	PNCT	NTUS	552202	098847
----	GM	80	4178		1	4848.0	18.8	FE4K:	18.9	RATIO:	0.9822	
	GM	80	4178	98137	HW:2	4183.0	24.4	EM:1	PNCT	NTUS	552200	098847
	GM	80	4178	788815	HW:2	4242.8	24.7	EM:1	PNCT	USED	552200	098847
----	GM	80	4178		2	4197.8	24.5	FE4K:	24.5	RATIO:	1.0000	
	GM	80	4178	99060	HW:2	4859.0	25.4	EM:1	PNCT	NTUS	552202	098847
----	GM	80	4178		2	4859.0	25.4	FE4K:	24.5	RATIO:	1.0347	
	GM	80	4207	97058	C:1	3980.5	18.1	EM:1	PNCT	NTUS	538301	889115
	GM	80	4207	97388	C:1	4090.0	18.1	FE:2	PNCT	USED	538301	889115
----	GM	80	4207		1	4028.3	18.1	FE4K:	18.1	RATIO:	1.0000	
	GM	80	4207	98577	C:1	4536.0	17.2	EM:1	PCRT	USED	538302	889115
--	GM	80	4207		1	4536.0	17.2	FE4K:	18.1	RATIO:	0.9503	
	GM	80	4207	97059	HW:2	3978.0	24.8	EM:1	PNCT	NTUS	538301	889115
	GM	80	4207	97390	HW:2	4101.0	24.4	FE:2	PNCT	USED	538301	889115
----	GM	80	4207		2	4039.5	24.5	FE4K:	24.5	RATIO:	1.0000	
	GM	80	4207	98678	HW:2	4548.0	23.8	EM:1	PNCT	USED	538302	889115
----	GM	80	4207		2	4548.0	23.8	FE4K:	24.5	RATIO:	0.9714	
	GM	80	4223	11108	C:1	3748.0	18.8	EM:1	PNCT	USED	883800	880153
	GM	80	4223	801972	C:1	3981.3	18.2	EM:1	PCRT	NTUS	883800	880153
----	GM	80	4223		1	3854.8	18.4	FE4K:	18.4	RATIO:	1.0000	
	GM	80	4223	99358	C:1	5079.0	18.8	EM:1	PCRT	NTUS	812801	889178
	GM	80	4223	99551	C:1	5437.0	18.4	FE:2	PNCT	USED	812801	889178
----	GM	80	4223		1	5258.0	18.8	FE4K:	18.4	RATIO:	1.0109	
	GM	80	4223	11110	HW:2	3782.0	25.3	EM:1	PNCT	USED	883800	880153
	GM	80	4223	801971	HW:2	3972.1	24.8	EM:1	PNCT	NTUS	883800	880153
----	GM	80	4223		2	3882.0	24.8	FE4K:	24.8	RATIO:	1.0000	
	GM	80	4223	99359	HW:2	5090.0	25.0	EM:1	PNCT	USED	812801	889178
	GM	80	4223	99852	HW:2	5448.0	24.9	FE:2	PNCT	NTUS	812801	889178
----	GM	80	4223		2	5289.0	24.9	FE4K:	24.8	RATIO:	1.0043	
	GM	80	4234	98648	C:1	4217.0	18.1	EM:1	PNCT	NTUS	553202	88992
----	GM	80	4234		1	4217.0	18.1	FE4K:	18.1	RATIO:	1.0000	
	GM	80	4234	98398	C:1	5313.0	16.4	FE:2	PNCT	USED	553202	88992
----	GM	80	4234		1	5313.0	16.4	FE4K:	16.1	RATIO:	1.0188	
	GM	80	4234	98649	HW:2	4228.0	22.8	EM:1	PNCT	USED	553202	88992
----	GM	80	4234		2	4228.0	22.8	FE4K:	22.8	RATIO:	1.0000	
	GM	80	4234	99400	HW:2	5324.0	22.4	FE:2	PNCT	NTUS	553202	88992
----	GM	80	4234		2	5324.0	22.4	FE4K:	22.8	RATIO:	0.9825	
	GM	80	4237	98128	C:1	4019.0	17.1	EM:1	PCRT	USED	553301	889153
----	GM	80	4237		1	4019.0	17.1	FE4K:	17.1	RATIO:	1.0000	
	GM	80	4237	98178	C:1	5083.0	18.5	EM:1	PCRT	USED	553205	88992
----	GM	80	4237		1	5083.0	18.5	FE4K:	17.1	RATIO:	0.9849	
	GM	80	4237	98129	HW:2	4080.0	23.5	EM:1	PNCT	USED	553301	889153
----	GM	80	4237		2	4080.0	23.5	FE4K:	23.5	RATIO:	1.0000	
	GM	80	4237	98179	HW:2	5093.0	22.4	EM:1	PNCT	NTUS	553205	88992
	GM	80	4237	11100	HW:2	5567.0	23.9	EM:1	PNCT	USED	553205	88992
----	GM	80	4237		2	5330.0	23.1	FE4K:	23.5	RATIO:	0.9841	
	FIAT	80	4447	95418	C:1	3943.0	20.4	EM:1	PNCT	NTUS	542700	0470173
	FIAT	80	4447	798283	C:1	4008.8	20.3	EM:1	PCRT	USED	542700	0470173
----	FIAT	80	4447		1	3978.4	20.3	FE4K:	20.3	RATIO:	1.0000	
	FIAT	80	4447	12972	C:1	4854.0	20.3	EM:1	PCRT	USED	878001	0485019
----	FIAT	80	4447		1	4854.0	20.3	FE4K:	20.3	RATIO:	0.9878	
	FIAT	80	4447	95419	HW:2	3954.0	25.4	EM:1	PNCT	NTUS	542700	0470173
	FIAT	80	4447	798282	HW:2	4028.7	24.4	EM:1	PNCT	USED	542700	0470173
----	FIAT	80	4447		2	3991.3	24.9	FE4K:	24.9	RATIO:	1.0000	
	FIAT	80	4447	12973	HW:2	4700.0	25.8	FE:2	PNCT	USED	878001	0485019

MFR	ACYR	K	TNUM	TPRO	QDD	RWMC	TTYP	CTD	N	VLD
CHRY	81	4931	804942	C : 1	7848.0	25.2	FE:2	PNCT USED	732001	D180
----	CHRY	81	4931		7550.5	25.5	FE4K:	24.9	RATIO:	1.0240
CHRY	81	4931	15987	HW:2	3830.0	41.2	EM:1	PNCT NTUS	898500	D188
CHRY	81	4931	803288	HW:2	3917.8	39.4	EM:1	PNCT USED	898500	D188
----	CHRY	81	4931		3873.9	40.3	FE4K:	40.3	RATIO:	1.0000
CHRY	81	4931	18188	HW:2	7488.0	42.8	FE:2	PNCT NTUS	732001	D180
CHRY	81	4931	804837	HW:2	7615.0	41.8	FE:2	PNCT USED	732001	D180
----	CHRY	81	4931		7540.5	42.1	FE4K:	40.3	RATIO:	1.0482
CHRY	81	4948	13215	C : 1	3713.0	21.9	EM:1	PNCT NTUS	888100	D181
CHRY	81	4948	802248	C : 1	3848.0	22.9	EM:1	PNCT USED	888100	D181
CHRY	81	4948	16281	C : 1	4137.0	23.2	EM:1	PNCT NTUS	888100	D181
CHRY	81	4948	18282	C : 1	4183.0	22.1	EM:1	PNCT USED	888103	D181
----	CHRY	81	4948		3989.8	22.5	FE4K:	22.5	RATIO:	1.0000
CHRY	81	4948	18588	C : 1	4330.0	23.1	EM:1	PNCT USED	888101	D181
----	CHRY	81	4948		4330.0	23.1	FE4K:	22.5	RATIO:	1.0281
CHRY	81	4948	16956	C : 1	4388.0	23.8	EM:1	PNCT USED	888102	D181
----	CHRY	81	4948		4388.0	23.8	FE4K:	22.5	RATIO:	1.0572
CHRY	81	4948	17653	C : 1	4473.0	23.9	EM:1	PNCT NTUS	888101	D181
----	CHRY	81	4948		4473.0	23.9	FE4K:	22.5	RATIO:	1.0817
CHRY	81	4948	13218	HW:2	3724.0	30.8	EM:1	PNCT NTUS	888100	D181
CHRY	81	4948	802212	HW:2	3794.0	30.6	EM:1	PNCT USED	888100	D181
CHRY	81	4948	802240	HW:2	3884.0	30.4	EM:1	PNCT NTUS	888100	D181
CHRY	81	4948	16587	HW:2	4193.0	30.2	EM:1	PNCT USED	888103	D181
----	CHRY	81	4948		3893.8	30.4	FE4K:	30.4	RATIO:	1.0000
CHRY	81	4948	18588	HW:2	4341.0	31.8	EM:1	PNCT USED	888101	D181
----	CHRY	81	4948		4341.0	31.8	FE4K:	30.4	RATIO:	1.0444
CHRY	81	4948	16957	HW:2	4378.0	31.3	EM:1	PNCT USED	888102	D181
----	CHRY	81	4948		4378.0	31.3	FE4K:	30.4	RATIO:	1.0279
CHRY	81	4948	17654	HW:2	4484.0	33.8	EM:1	PNCT NTUS	888101	D181
----	CHRY	81	4948		4484.0	33.8	FE4K:	30.4	RATIO:	1.1038
FORD	81	5034	18412	C : 1	3974.0	27.9	EM:1	PNCT NTUS	739000	1E2-1.6-F-441
FORD	81	5034	804658	C : 1	4088.4	27.3	EM:1	PNCT USED	739000	1E2-1.6-F-441
----	FORD	81	5034		4029.7	27.8	FE4K:	27.8	RATIO:	1.0000
FORD	81	5034	20408	C : 1	4409.0	28.7	FE:2	PNCT NTUS	739001	1E2-1.6-F-441
FORD	81	5034	805348	C : 1	4512.7	27.9	FE:2	PNCT USED	739001	1E2-1.6-F-441
----	FORD	81	5034		4460.8	28.3	FE4K:	27.8	RATIO:	1.0253
FORD	81	5034	18413	HW:2	3888.0	44.9	EM:1	PNCT NTUS	739000	1E2-1.6-F-441
FORD	81	5034	804657	HW:2	4115.4	44.0	EM:1	PNCT USED	739000	1E2-1.6-F-441
----	FORD	81	5034		4050.7	44.4	FE4K:	44.4	RATIO:	1.0000
FORD	81	5034	20408	HW:2	4421.0	44.0	FE:2	PNCT NTUS	739001	1E2-1.6-F-441
FORD	81	5034	805349	HW:2	4523.7	44.4	FE:2	PNCT USED	739001	1E2-1.6-F-441
----	FORD	81	5034		4472.3	44.2	FE4K:	44.4	RATIO:	0.9945
FORD	81	5049	23544	C : 1	4201.0	21.5	FE:2	PNCT NTUS	749901	1Z1-2.3-F-272
FORD	81	5049	807058	C : 1	4233.0	20.0	FE:2	PNCT USED	749901	1Z1-2.3-F-272
----	FORD	81	5049		4217.0	20.7	FE4K:	20.7	RATIO:	1.0000
FORD	81	5049	22937	C : 1	5883.0	21.5	FE:2	PNCT NTUS	779500	1Z1-2.3-H-274
FORD	81	5049	806991	C : 1	5975.0	20.2	FE:2	PNCT USED	779500	1Z1-2.3-H-274
----	FORD	81	5049		5834.0	20.8	FE4K:	20.7	RATIO:	1.0052
FORD	81	5049	23548	HW:2	4220.0	31.9	FE:2	PNCT NTUS	749901	1Z1-2.3-F-272
FORD	81	5049	807059	HW:2	4241.4	31.3	FE:2	PNCT USED	749901	1Z1-2.3-F-272
----	FORD	81	5049		4230.7	31.8	FE4K:	31.8	RATIO:	1.0000
FORD	81	5049	22938	HW:2	5710.0	32.8	FE:2	PNCT NTUS	779500	1Z1-2.3-H-274
FORD	81	5049	806992	HW:2	5981.2	31.1	FE:2	PNCT USED	779500	1Z1-2.3-H-274
----	FORD	81	5049		5850.8	31.8	FE4K:	31.8	RATIO:	1.0074
FORD	81	5051	19988	C : 1	3835.0	20.4	EM:1	PNCT NTUS	749900	1Z1-2.3-F-272
FORD	81	5051	808680	C : 1	4098.8	20.2	EM:1	PNCT USED	749900	1Z1-2.3-F-272
----	FORD	81	5051		4018.3	20.3	FE4K:	20.3	RATIO:	1.0000
FORD	81	5051	23031	C : 1	5855.0	21.0	FE:2	PNCT USED	779502	1Z1-2.3-H-274
----	FORD	81	5051		5855.0	21.0	FE4K:	20.3	RATIO:	1.0345
FORD	81	5051	19832	HW:2	3903.0	29.3	EM:1	PNCT NTUS	749900	1Z1-2.3-F-272
FORD	81	5051	805295	HW:2	4057.0	30.9	EM:1	PNCT USED	749900	1Z1-2.3-F-272
----	FORD	81	5051		3980.0	30.1	FE4K:	30.1	RATIO:	1.0000
FORD	81	5051	23032	HW:2	5888.0	31.5	FE:2	PNCT USED	779502	1Z1-2.3-H-274
----	FORD	81	5051		5888.0	31.5	FE4K:	30.1	RATIO:	1.0473
FORD	81	5107	18830	C : 1	3807.0	15.2	EM:1	PNCT NTUS	710400	1F1-5.0-F-936
FORD	81	5107	18254	C : 1	3872.0	14.4	EM:1	PNCT USED	710400	1F1-5.0-F-936
----	FORD	81	5107		3829.5	14.8	FE4K:	14.8	RATIO:	1.0000
FORD	81	5107	18088	C : 1	5808.0	15.2	FE:2	PNCT USED	735100	1F1-5.0-H-810
FORD	81	5107	18636	C : 1	5953.0	14.2	FE:2	PNCT NTUS	735100	1F1-5.0-H-810
----	FORD	81	5107		5879.8	14.7	FE4K:	14.8	RATIO:	0.9928
FORD	81	5107	16831	HW:2	3828.0	18.8	EM:1	PNCT NTUS	710400	1F1-5.0-F-936
FORD	81	5107	18285	HW:2	3884.0	18.0	EM:1	PNCT USED	710400	1F1-5.0-F-936
----	FORD	81	5107		3855.0	18.3	FE4K:	18.3	RATIO:	1.0000
FORD	81	5107	18089	HW:2	5818.0	19.1	FE:2	PNCT USED	735100	1F1-5.0-H-810
FORD	81	5107	19835	HW:2	5922.0	19.4	FE:2	PNCT NTUS	735100	1F1-5.0-H-810
----	FORD	81	5107		5870.0	19.2	FE4K:	18.3	RATIO:	1.0521
FORD	81	5188	14245	C : 1	3849.0	17.6	EM:1	PNCT NTUS	875400	1U2-4.9-F-950
FORD	81	5188	18283	C : 1	4057.0	17.5	EM:1	PNCT NTUS	875400	1U2-4.9-F-950
FORD	81	5188	803387	C : 1	4184.0	17.2	EM:1	PNCT USED	875400	1U2-4.9-F-950
----	FORD	81	5188		4030.0	17.4	FE4K:	17.4	RATIO:	1.0000
FORD	81	5188	18092	C : 1	5959.0	17.9	FE:2	PNCT USED	730802	1U2-4.9-H-847
----	FORD	81	5188		5959.0	17.9	FE4K:	17.4	RATIO:	1.0259
FORD	81	5188	18284	HW:2	4087.0	23.1	EM:1	PNCT NTUS	875400	1U2-4.9-F-950
FORD	81	5188	803388	HW:2	4203.0	22.7	EM:1	PNCT USED	875400	1U2-4.9-F-950
----	FORD	81	5188		4145.0	22.9	FE4K:	22.9	RATIO:	1.0000
FORD	81	5188	18093	HW:2	5970.0	23.3	FE:2	PNCT USED	730802	1U2-4.9-H-847
----	FORD	81	5188		5970.0	23.3	FE4K:	22.9	RATIO:	1.0175
FORD	81	5192	13497	C : 1	3857.0	14.7	EM:1	PNCT NTUS	879700	1U1-4.9-F-104
FORD	81	5192	802408	C : 1	3958.1	15.2	EM:1	PNCT USED	879700	1U1-4.9-F-104
----	FORD	81	5192		3907.5	14.9	FE4K:	14.9	RATIO:	1.0000
FORD	81	5192	17587	C : 1	5810.0	15.8	FE:2	PNCT USED	729600	1U1-4.9-H-834
----	FORD	81	5192		5810.0	15.8	FE4K:	14.9	RATIO:	1.0572

MFR	ACR	K	TNUM	TPRO	ODD	RWMC	TTYP	CTD	FED	INT#	VRSN	VID
GM	81	5411	20378	HW:2	7778.0	27.3	FE:2	PNCT	USED	780100		1484-8078F
----	GM	81	5411	2	7752.0	27.3	FE4K:	27.0	RATIO:	1.0088		
GM	81	5418	802880	C:1	3978.8	18.0	EM:1	PCRT	USED	888400		880131
----	GM	81	5418	1	3978.8	18.0	FE4K:	18.0	RATIO:	1.0000		
GM	81	5418	20080	C:1	4732.0	18.4	FE:2	PNCT	USED	888403		880131
----	GM	81	5418	1	4732.0	18.4	FE4K:	18.0	RATIO:	1.0222		
GM	81	5418	20082	C:1	7825.0	18.2	FE:2	PNCT	NTUS	755200		14F4-8053F
GM	81	5418	808431	C:1	7820.3	18.0	FE:2	PNCT	USED	755200		14F4-8053F
----	GM	81	5418	1	7772.8	18.1	FE4K:	18.0	RATIO:	1.0611		
GM	81	5418	18708	HW:2	3844.0	23.8	EM:1	PNCT	NTUS	888400		880131
GM	81	5418	802881	HW:2	3888.8	23.8	EM:1	PNCT	USED	888400		880131
----	GM	81	5418	2	3820.4	23.6	FE4K:	23.8	RATIO:	1.0000		
GM	81	5418	20081	HW:2	4743.0	28.1	FE:2	PNCT	USED	888403		880131
----	GM	81	5418	2	4743.0	28.1	FE4K:	23.8	RATIO:	1.0838		
GM	81	5418	20083	HW:2	7836.0	27.8	FE:2	PNCT	NTUS	755200		14F4-8053F
GM	81	5418	808430	HW:2	7831.1	27.8	FE:2	PNCT	USED	755200		14F4-8053F
----	GM	81	5418	2	7783.8	27.7	FE4K:	23.8	RATIO:	1.1737		
GM	81	5417	18813	C:1	3782.0	17.2	EM:1	PNCT	NTUS	711700		880118
GM	81	5417	803800	C:1	3930.0	17.4	EM:1	PCRT	USED	711700		880118
GM	81	5417	18842	C:1	4085.0	17.5	FE:2	PNCT	NTUS	711700		880118
----	GM	81	5417	1	3825.7	17.4	FE4K:	17.4	RATIO:	1.0000		
GM	81	5417	20208	C:1	7845.0	18.1	FE:2	PNCT	USED	758200		14F4-80115F
----	GM	81	5417	1	7845.0	18.1	FE4K:	17.4	RATIO:	1.0423		
GM	81	5417	18814	HW:2	3783.0	28.4	EM:1	PNCT	NTUS	711700		880118
GM	81	5417	803824	HW:2	3884.8	28.7	EM:1	PNCT	USED	711700		880118
GM	81	5417	18843	HW:2	4108.0	28.7	FE:2	PNCT	NTUS	711700		880118
----	GM	81	5417	2	3854.5	28.6	FE4K:	28.8	RATIO:	1.0000		
GM	81	5417	20207	HW:2	7858.0	28.8	FE:2	PNCT	USED	758200		14F4-80115F
----	GM	81	5417	2	7858.0	28.8	FE4K:	28.8	RATIO:	1.0350		
GM	81	5418	17754	C:1	3824.0	17.0	EM:1	PNCT	NTUS	724100		890101
GM	81	5418	18438	C:1	4074.0	17.1	EM:1	PCRT	USED	724100		890101
GM	81	5418	20152	C:1	4110.0	17.8	FE:2	PNCT	USED	728001		890103
GM	81	5418	20184	C:1	4154.0	17.7	FE:2	PNCT	USED	728001		890103
----	GM	81	5418	1	4085.5	17.4	FE4K:	17.4	RATIO:	1.0000		
GM	81	5418	20208	C:1	7842.0	17.4	FE:2	PNCT	USED	758300		14F4-9084F
GM	81	5418	20210	C:1	7888.0	17.8	FE:2	PNCT	USED	758300		14F4-9084F
GM	81	5418	20212	C:1	7731.0	17.8	FE:2	PNCT	USED	758300		14F4-9084F
----	GM	81	5418	1	7888.3	17.8	FE4K:	17.4	RATIO:	1.0118		
GM	81	5418	17753	HW:2	3828.0	23.8	EM:1	PNCT	NTUS	724100		890101
GM	81	5418	18438	HW:2	4088.0	23.8	EM:1	PNCT	USED	724100		890101
GM	81	5418	20183	HW:2	4121.0	24.1	FE:2	PNCT	USED	728001		890103
GM	81	5418	20188	HW:2	4188.0	24.4	FE:2	PNCT	USED	728001		890103
----	GM	81	5418	2	4081.8	23.9	FE4K:	23.8	RATIO:	1.0000		
GM	81	5418	20211	HW:2	7897.0	24.7	FE:2	PNCT	USED	758300		14F4-9084F
----	GM	81	5418	2	7897.0	24.7	FE4K:	23.8	RATIO:	1.0328		
GM	81	5420	17044	C:1	3830.0	18.8	EM:1	PNCT	NTUS	720800		880117
GM	81	5420	803781	C:1	4022.0	18.8	EM:1	PCRT	USED	720800		880117
----	GM	81	5420	1	3928.0	18.7	FE4K:	18.7	RATIO:	1.0000		
GM	81	5420	20219	C:1	8080.0	17.0	FE:2	PNCT	USED	788201		14F4-80115F
----	GM	81	5420	1	8080.0	17.0	FE4K:	18.7	RATIO:	1.0180		
GM	81	5420	17048	HW:2	3841.0	28.8	EM:1	PNCT	NTUS	720800		880117
GM	81	5420	803780	HW:2	4033.7	28.2	EM:1	PNCT	USED	720800		880117
----	GM	81	5420	2	3937.3	28.4	FE4K:	28.4	RATIO:	1.0000		
GM	81	5420	20220	HW:2	8091.0	27.2	FE:2	PNCT	NTUS	758201		14F4-80115F
GM	81	5420	20527	HW:2	8188.0	27.3	FE:2	PNCT	USED	758201		14F4-80115F
----	GM	81	5420	2	8139.8	27.2	FE4K:	28.4	RATIO:	1.0728		

COUNTS(4K): CITY.EMISS : 93 HW.EMISS : 92 CITY.FE : 28 HW.FE : 28
COUNTS(+K): CITY.EMISS : 30 HW.EMISS : 30 CITY.FE : 99 HW.FE : 99