

## **APPENDIX C**

### **Reports**

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**CAFE Reports**

UNITED STATES ENVIRONMENT PROTECTION AGENCY  
ANN ARBOR, MICHIGAN 48105  
OFFICE OF MOBILE SOURCES

-----  
March 11, 1997

Mr. Blandings, Director  
MATTHEWS MOTORS Automotive Emissions/Fuel Economy  
The American Road  
Ann Arbor, MI 48121

Mr. Blandings:

This letter serves to formally acknowledge the receipt of your 1995 final average fuel economy calculation dated February 11, 1997 for Domestic Passenger Vehicles. We calculated an unadjusted value of 33.747 miles per gallon (mpg), which confirms your value.

In accordance with 40 CFR 600.510-86(e), we calculated an adjusted value of 34 mpg; this value will serve as our official determination.

A copy of the calculation is enclosed.

Sincerely yours,

Thomas M. Ball  
Vehicle Programs and Compliance  
Office of Mobile Sources

Enclosures

cc: D. Brayley, CB  
R. Heavenrich, RPT-TDG  
L. Loy, NHTSA

CAFE Confirmation Letter

Date: 10-MAR-97  
Time: 05:22:59 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

CORPORATE AVERAGE FUEL ECONOMY

CAFE REPORT

MANUFACTURERS FUEL ECONOMY CALCULATIONS FOR MDEL YEAR 1995

Manufacturer Name: MATTHEWS MOTORS

Compliance Category: 8

Fuel Economy Average Combined

Adjusted Rounded: 16.3

Adjusted Unrounded: 12

Rounded: 16.3

Unrounded: 16.3486

App. Std.: 20.6

Statistics

1. Number of Model Types: 6

2. Number of Base Levels: 5

3. Number of Configurations:

Tested: 6

Not Tested: 0

4. Percent of Total Production  
Represented By Test Vehicles: .07

5. Total Number of Vehicles Tested: 14

6. Total Number of Vehicles: 20926

-----

Date: 10-MAR-97  
 Time: 05:29:16 PM  
 Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 CORPORATE AVERAGE FUEL ECONOMY  
 FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1995  
 CONFIGURATION CALCULATIONS

Compliance Category: 2 IMPORT PASSENGER VEHICLES  
 Manufacturer: MATTHEWS MOTORS  
 Engine Block Descriptor: PRE-CAT  
 Combustion Cycle: G OTTO CYCLE PISTON

Index Number: 76  
 CID: 196  
 CYL: 6

Fuel Injection Desc: M MULTI POINT

D T	R R	O	Transmission	IWT	ETW	Code	Engine	Road	Axle Load	Vehicle	Ratio	HP	ID	C A	City	Fuel Economy	Highway	Fuel Economy	Test Actual	Average	Test Actual	Average	MPG	MPG
V N	D	Descriptor												F V	G	Number	MPG	MPG	Number	MPG	MPG	MPG	MPG	MPG

F L4 2 LKUP 4000 3875 SZL3/1-03 4.79 7.9 E94ZL6 4 170676

Sales For This Subconfiguration: 46  
 Harmonically Averaged Fuel Economy

Configuration Sales Weighted (By Subconfiguration)  
 Fuel Economy

City:  
 Highway:  
 Combined:

D T	R R	O	Transmission	IWT	ETW	Code	Engine	Road	Axle Load	Vehicle	Ratio	HP	ID	C A	City	Fuel Economy	Highway	Fuel Economy	Test Actual	Average	Test Actual	Average	MPG	MPG
V N	D	Descriptor												F V	G	Number	MPG	MPG	Number	MPG	MPG	MPG	MPG	

F L4 2 LKUP 4000 3875 SZF3/1-03 4.79 7.9 A93YY3 14 170502

Sales For This Subconfiguration: 200  
 Harmonically Averaged Fuel Economy

Configuration Sales Weighted (By Subconfiguration)  
 Fuel Economy

City:  
 Highway:  
 Combined:

CAFE Intermediate Calculations (Vehicle Configuration)



Date: 10-MAR-97  
 Time: 05:24:27 PM  
 Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 CORPORATE AVERAGE FUEL ECONOMY  
 FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1992  
 BASE LEVEL CALCULATIONS

Compliance Category: 2 IMPORT PASSENGER VEHICLES  
 Manufacturer: MATTHEWS MOTORS  
 Engine Block Descriptor:  
 Index Number: 1  
 CID:98  
 Fuel Injection Desc:M  
 MULTI POINT  
 CYL: 4  
 OTTO CYCLE PISTON  
 Combustion Cycle: G

Drv Sys	Trn Typ	Ov Dr	Transmission Descriptor	ITW	Engine Code	Axle Ratio	Sls %	City FE Conf MPG	Highway FE Conf MPG	Combined FE Conf MPG	Total Base Sales
F	L3	1	LKUP	2500	BG16DFAL	3.48	1500	100			8172
F	L3	1	LKUP	2750	BG16DFAL	3.48	32	100			12144

VEHICLE CONFIGURATION NOT TESTED

Drv Sys	Trn Typ	Ov Dr	Transmission Descriptor	ITW	Engine Code	Axle Ratio	Sales
F	M4	1		2500	BG16DFM1	3.55	0
F	M5	2		2750	BG16DFM2	3.9	0

CAFE Intermediate Calculations (Base Level)

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 CORPORATE AVERAGE FUEL ECONOMY  
 FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1992  
 MODEL TYPE CALCULATIONS

Date: 10-MAR-97  
 Time: 05:03:55 PM

Compliance Category: 2 IMPORT PASSENGER VEHICLES Index Number: 1  
 Manufacturer: MM MATTHEWS MOTORS CID: 91  
 Engine Block Descriptor: M MULTI POINT CYL: 4  
 Combustion Cycle: G OTTO CYCLE PISTON Fuel Injection Descriptor: M MULTI POINT

Unadjusted Fuel Economy MPG

Car Line	Drv Trn Ov Sys Typ Dr	Transmission Descriptor	IWT	Sales %	Total Sales	City		Highway		Combined	
						Base Level	Model Type	Base Level	Model Type	Base Level	Model Type

CIVIC	F	L4	2	LKUP	2500	101986	122	83033				
-------	---	----	---	------	------	--------	-----	-------	--	--	--	--

CIVIC	F	L4	2	LKUP	2750	44072	53	83033				
-------	---	----	---	------	------	-------	----	-------	--	--	--	--

CAFE Intermediate Calculations (Model Type)

Date: 11-MAR-97  
 Time: 01:49:14 PM  
 CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 CORPORATE AVERAGE FUEL ECONOMY  
 CAFE STATUS REPORT FOR MODEL YEAR 1995  
 Page: 1

Manufacturer Code & Name	Compliance Category	Letter Date	Letter Date	First Date	Last Date	Caft Discrepancy	Total Sales MFR	CAFE Adj MFR	CAFE Unadj MFR
20 CHRYSLER	DOMESTIC PASSENGER VEHICLES	03-SEP-96	11-FEB-97	11-FEB-97	11-FEB-97	MINOR DISCREPANCY	850676	28.4	28.1151
20 CHRYSLER	IMPORT PASSENGER VEHICLES	03-SEP-96	11-FEB-97	11-FEB-97	11-FEB-97	MINOR DISCREPANCY	104094	28.6	28.2961
20 CHRYSLER	DOMESTIC TRUCKS	03-SEP-96	11-FEB-97	11-FEB-97	11-FEB-97	MINOR DISCREPANCY	1235356	20.1	20.0607
40 GENERAL MOTORS	DOMESTIC PASSENGER VEHICLES	24-JUL-96	11-FEB-97	11-FEB-97	11-FEB-97	MINOR DISCREPANCY	3039085	27.4	27.0802
40 GENERAL MOTORS	IMPORT PASSENGER VEHICLES	13-AUG-96	11-FEB-97	11-FEB-97	11-FEB-97	NO DISCREPANCY	107749	36.7	36.439
40 GENERAL MOTORS	DOMESTIC TRUCKS	17-JUL-96	11-FEB-97	11-FEB-97	11-FEB-97	NO DISCREPANCY	1921791	20.1	20.1031
120 BMW	IMPORT PASSENGER VEHICLES	22-MAY-96	11-FEB-97	11-FEB-97	11-FEB-97	NO DISCREPANCY	119423	25.3	25.1066
200 MERCEDES BENZ	IMPORT PASSENGER VEHICLES	16-AUG-96	11-FEB-97	11-FEB-97	11-FEB-97	MINOR DISCREPANCY	100172	24.7	24.5548
230 FIAT	IMPORT PASSENGER VEHICLES	08-APR-96	11-FEB-97	11-FEB-97	11-FEB-97	NO DISCREPANCY	1358	15.7	15.5408

CAFE Status Report

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## **Car Line Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

CARLINE  
DATABASE REPORT

Date: 18-NOV-96  
Time: 09:34:58 AM

Model Year: 1997  
Manufacturer: 9001 SDC TEST Manufacturer 1  
Abbreviated Name: SDCT1  
Division: 1 SDCT1 Division 1  
Abbreviated Name: T1-D1  
Domestic/Import: Domestic Import Content: 000.0%

Carline Name	Carline Abbreviated Name	Carline Class	Average Interior Volume	Pass Lugg	Two Door Volume	Four Door Volume	Hatch Back Volume
10 SUB COMPACT 2 DOOR CAR	SUBCOMP 2 DR	03 SUBCOMPACT CARS	81.932	12.553	82	13	

No State Restrictions.

Date: 18-NOV-96  
Time: 09:32:55 AM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

CAR LINE  
SUBMISSION STATUS REPORT PART I  
DATA SUBMITTED

Manufacturer: 9001 SDC TEST Manufacturer 1  
Submission No: 1 Submission Date: 31-OCT-96 Submission Time: 01:29:28 PM

Trans No Record No Record Image

1 1 CIA9001 1997 1 08 04 COMPACT 4 DOOR CAR COMP 4 DR I 90

No Errors

1 2 C2 9001 1997 1 08 92.779 13.444 93 13

No Errors

1 3 CSA PR

No Errors

1 4 ZZ

No Errors

2 1 CIA9001 1997 1 09 04 COMPACT 2 DOOR CAR COMP 2 DR D 0

No Errors

Car Line Submission Status Report (Part 1)

Date: 18-NOV-96  
Time: 09:33:30 AM

Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

CAR LINE  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 1      Submission Date 31-OCT-96      Submission Time: 01:29:28 PM

Record Type	Number of Records
C1	10
C2	10
CS	1

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	10	10	0
Totals:	10	10	0

Car Line Submission Status Report (Part 2)



## **Miscellaneous Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 1997 FUEL ECONOMY GUIDE - 2 NUMBER  
 ESTIMATED MPG CITY/HIGHWAY

Date: 10-MAR-97  
 Time: 05:03:33 PM

LARGE CARS

Division Name	Estimated Cty Hwy	Average Annual Fl Cost	Engine Description CID(Opt Dspl)/CYL Type	Fl Typ	Drv Sys	Trn Typ	Ovr Drv	Trans Descr	Body Type Int. Space Pass/Truck Cargo(Cu.Ft)
MATTHEWS MOTORS									
MATTHEWS FLYER	17 25		281(4.6) 8 (NGV)	C	R	L4	5	LKUP	4DR-111/21
MATTHEWS FLYER	16 23		281(4.6) 8	R	R	L4	5	LKUP	4DR-111/21
MATTHEWS FLYER	17 25		281(4.6) 8	R	R	L4	5	LKUP	4DR-111/21

Legend

+ :State Restriction Applies. ++ :Indicates Police Data.

Date: 10-MAR-97  
 Time: 05:04:56 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 1997 FUEL ECONOMY GUIDE - 3 NUMBER  
 ESTIMATED MPG CITY/HIGHWAY/COMBINED

Page: 1

LARGE CARS

Division Name	Estimated Cty Hwy Cmb	Average Annual Fl Cost	Engine Description CID(Opt Dspl) CYL Type	Fl Typ	Drv Sys	Trn Typ	Ovr Drv	Trans Descr	Body Type Int. Space Pass/Truck Cargo(Cu.Ft)
MATTHEW MOTORS									
MATTHEWS FLYER	17 25 20		281(4.6) 8 (NGV)	C	R	L4	5	LKUP	4DR-111/21
MATTHEWS FLYER	16 23 19		281(4.6) 8	R	R	L4	5	LKUP	4DR-111/21
MATTHEWS FLYER	17 25 20		281(4.6) 8	R	R	L4	5	LKUP	4DR-111/21

Legend

+ : State Restriction Applies.    ++ : Indicates Police Data.

Date: 10-MAR-97  
 Time: 05:06:05 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 1997 FUEL ECONOMY GUIDE - 6 NUMBER  
 ESTIMATED AND UNADJUSTED MPG CITY/HIGHWAY/COMBINED

Page: 1

LARGE CARS

Division Name	Miles Per Gallon			Average Engine Description	CYL Type	Fl	Drv	Trn	Ovr	Trans	Body Type					
	Estimated	Unadjusted	Annual													
MATTHEWS MOTORS																
MATTHEWS FLYER	16	23	19	18	29	22	281	(4.6)	8	R	R	L4	5	LKUP	4DR-111/21	
MATTHEWS FLYER	17	25	20	19	32	23	281	(4.6)	8	R	R	L4	5	LKUP	4DR-111/21	
MATTHEWS FLYER	17	25	20	19	33	24	281	(4.6)	8	(NGV)	C	R	L4	5	LKUP	4DR-111/21

Legend

+ : State Restriction Applies.    ++ : Indicates Police Data.

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

TEST CAR LIST

1997 FUEL ECONOMY PROGRAM  
 VI REPORT - PASSENGER CARS

Manufacturer Name: 9007 SDC TEST 7 Engine Block Descriptor: TEXT  
 Vehicle ID Control Systems Dr. Trns ETW Comp Axle N/V  
 F Exhaust Evap Sys.typ Lbs. Ratio Ratio Ratio

-----  
 Newly Tested Vehicles

SUBCOMP 2 DR VI\_TST\_ORIG\_VEH 0 3.2 260 /// /102 1 01 4000 10.4 2.15 50.1  
 SUBCOMP 2 DR VI\_TST\_ORIG\_VEH 0 3.2 260 /// /102 1 01 4000 10.4 2.15 50.1

Previously Tested Vehicles

SUBCOMP 2 DR VI\_TST\_ORIG\_VEH 0 3.2 260 /// /102 1 01 4000 10.4 2.15 50.1  
 SUBCOMP 2 DR VI\_TST\_ORIG\_VEH 0 3.2 260 /// /102 1 01 4000 10.4 2.15 50.1

TESTS REPORT

Vehicle ID C Act. A S City Emissions Un Adj Highway Emissions Unadjusted  
 F A Dyno V Cty Hwy I (Grams/Mile) Cty (Grams/Mile) Hwy Cmb  
 G C HP G Wt. Wt. L HC CO CO2 NOX PM MPG HC CO CO2 NOX PM MPG

-----  
 Newly Listed Test Vehicles

VI\_TST\_ORIG\_VEH 0 Y 34 A .65 2 .01 .05 231.1.01005 45.3 49.3842  
 Y 35 A .65 1 .01 .05 231.1 .01005 55.5

Previously Listed Test Vehicles

VI\_TST\_ORIG\_VEH 0 Y 34 2 .01 .05 231.1 .01005 45.1 49.0392  
 Y 35 1 .01 .05 231.1 .01005 54.9

Test Car List (Car)

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

TEST CAR LIST

1997 FUEL ECONOMY PROGRAM

VI REPORT - TRUCKS

Page: 1

Manufacturer Name: 20 MATTHEWS MOTORS Engine Block Descriptor:  
 Carline Name: Vehicle ID C F G Dis HP Control Systems Dr. Trns ETW Comp Axle N/V  
 Exhaust Evap Sys.typ Lbs. Ratio Ratio Ratio

Newly Tested Vehicles

Vehicle ID	Model	Year	Class	City Emissions (G/Mile)	City MPG	City NOX (G/Mile)	City PM (G/Mile)	City HC (G/Mile)	City CO (G/Mile)	Highway Emissions (G/Mile)	Highway CO2 (G/Mile)	Highway NOX (G/Mile)	Highway PM (G/Mile)	Highway Unadjusted Hwy MPG
RAM 1500 4WD PICKUP	D6R6-3212	3	Y	318	215	20	215	20	215	102	10	5000	9.1	3.55
RAM 1500 4WD PICKUP	D6R6-3212	0	Y	318	215	20	215	20	215	102	10	5500	9.1	3.55
DAKOTA PICKUP 4WD	D6N5-4027	0	Y	318	215	20	215	20	215	102	5	4250	9.1	3.55
DAKOTA PICKUP 4WD	D6N5-4027	2	Y	318	215	20	215	20	215	102	5	4500	9.1	3.55

Previously Tested Vehicles

Vehicle ID	Model	Year	Class	City Emissions (G/Mile)	City MPG	City NOX (G/Mile)	City PM (G/Mile)	City HC (G/Mile)	City CO (G/Mile)	Highway Emissions (G/Mile)	Highway CO2 (G/Mile)	Highway NOX (G/Mile)	Highway PM (G/Mile)	Highway Unadjusted Hwy MPG
D6R6-3212		3	Y	15.3	C	.65				3	.288	3.46	575	.381
D6R6-3212		0	Y	16.3	D	.35				2	.286	3.29	633	.174
D6N5-4027		0	Y	15.9	A	.35				2	.161	2.02650		.442
D6N5-4027		2	Y	15.8	B	.35				2	.185	1.9	640	.303

TESTS REPORT

Newly Listed Test Vehicles

Previously Listed Test Vehicles

Test Car List (Truck)

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)															Page: 1
1996 TEST DATA RESULTS REVIEW															
TEST PURPOSES: ALL															
Manufacturer: 40 MATTHEWS MOTORS															
Test	Test	FE	System	Trans	A/C										
Proc No.	Purp	Disp	Miles	Type	HP	MPG	UL	THC	NMHC	CO	NOX	PM			
-----															
VID = 2426NLS0W	Config # = 0	Displ = 2400	Car Line = GRAND AM												
Fam = TGM2.4VJGKEK	SIL = 1	Veh Purp = 01	Fuel = 6	N/V = 2400	Sales = FA										HP = 150
DynoHP = 5.9	Eng Code = 1														
2	175149	1	01	78	3767	L-4	YES	100	0.10	2.2	0.2				
					50			0.10	0.09	1.5	0.2				
13	175150	1	01	78	3767	L-4	YES								
3	175151	1	02	78	3778	L-4	YES	35.000000	100		*0.34	*0.00			
					50			*0.024		*0.34	*0.00				
VID = 2426NLS0W	Config # = 2	Displ = 2400	Car Line = GRAND AM												
Fam = TGM2.4VJGKEK	SIL = 1	Veh Purp = 01	Fuel = 6	N/V = 2400	Sales = FA										HP = 150
DynoHP = 5.7	Eng Code = 1														
3	175155	1	02	61	3912	L-4	YES	36.200000	100		*0.39	*0.01			
					50			*0.026		*0.39	*0.01				
VID = 2426NLS0W	Config # = 3	Displ = 2400	Car Line = GRAND AM												
Fam = TGM2.4VJGKEK	SIL = 1	Veh Purp = 01	Fuel = 6	N/V = 2400	Sales = FA										HP = 150
DynoHP = 5.7	Eng Code = 1														
72	175690	1	01	78	3916	L-4	YES	N/A							
VID = 2426NLS0W	Config # = 4	Displ = 2400	Car Line = GRAND AM												
Fam = TGM2.4VJGKEK	SIL = 1	Veh Purp = 01	Fuel = 6	N/V = 2400	Sales = FA										HP = 150
DynoHP = 5.7	Eng Code = 1														

Test Data Results Review

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

Date: 10-MAR-97  
Time: 05:08:34 PM

FUEL ECONOMY RANKING - MODEL 1997  
TWO SEATERS  
\*\*\* BASED ON Cty MPG VALUES \*\*\*

Estimated Cty	MPG Hwy	Cmb	Manufacturer Name	Car Line Name	Drive System	Trans Type	Over Driv	Transmission Descriptors	Fuel Type
9	13	10	VECTOR AEROMOTIVE CORPORATION	AVTECH SC / M12	R	M5	2		P
9	14	11	LAMBORGHINI	DB132/144 - DIABLO	4	M5	2		P
10	15	12	FERRARI	F355	R	M6	1		P
13	20	16	MERCEDES BENZ	SL600	R	A5	2	EMS	P
15	23	18	LOTUS	ESPRIT V8	R	M5	2		P
15	23	18	MERCEDES BENZ	SL500	R	A5	2	EMS	P
18	24	20	MERCEDES BENZ	SL320	R	A5	2	EMS	P
18	25	21	BMW	Z3 roadster	R	L4	2		P
19	27	22	BMW	Z3 roadster	R	M5	1		P
23	27	25	SUZUKI MOTOR CORPORATION	X-90 2WD	R	L4	5	LKUP	R
23	27	25	SUZUKI MOTOR CORPORATION	X-90 4WD	4	L4	5	LKUP	R
22	28	24	MAZDA MOTOR CORP.	MX-5 Miata	R	L4	4	LKUP	R
25	28	26	SUZUKI MOTOR CORPORATION	X-90 2WD	R	M5	2		R
25	28	26	SUZUKI MOTOR CORPORATION	X-90 4WD	4	M5	2		R
23	29	25	MAZDA MOTOR CORP.	MX-5 Miata	R	M5	2		R
26	30	28	HONDA	DEL SOL	F	M5	2		P
23	31	26	BMW	Z3 roadster	R	L4	2		P
23	31	26	BMW	Z3 roadster	R	M5	1		P
23	32	26	BMW	Z3 roadster	R	M5	1		P
28	35	30	HONDA	DEL SOL	F	L4	2	LKUP	R
28	35	31	HONDA	DEL SOL	F	L4	2	LKUP	R
30	36	32	HONDA	DEL SOL	F	M5	2		R
33	39	35	HONDA	DEL SOL	F	M5	2		R

Fuel Economy Ranking Report



CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 1993 FUEL ECONOMY GUIDE GAS GUZZLERS

Date: 10-MAR-97  
 Time: 05:07:13 PM

Manufacturer Name	Model Name	CID	CYL	Trans	Ovr	Cmb	Engine	Index	Exempt
				Type	Dr	MPG	Descriptors		
FORD	CROWN VICTORIA POLICE	281	8	L4	4	19		388	N
FORD	MUSTANG	302	8	M5	2	19		401	N
GENERAL MOTORS	ROADMASTER WGN	350	8	L4	2	19		105	N
GENERAL MOTORS	ROADMASTER	350	8	L4	2	19		105	N
GENERAL MOTORS	COACHB'LDR WGN	350	8	L4	2	19		105	N
GENERAL MOTORS	FLEETWOOD	350	8	L4	2	19		105	N
GENERAL MOTORS	CAPRICE	350	8	L4	2	19		105	N
GENERAL MOTORS	CAPRICE WAGON	350	8	L4	2	19		105	N
GENERAL MOTORS	COACHB'LDR WGN	350	8	L4	2	19		105	N
GENERAL MOTORS	SEVILLE	299	8	L4	4	19		640	N
GENERAL MOTORS	DEVILLE	299	8	L4	4	19		640	N
GENERAL MOTORS	ELDORADO	299	8	L4	4	19		640	N
NISSAN	Q45	274	8	L4	4	19		40	N
VOLKSWAGEN	CORRADO SLIC	170	6	L4	2	19		6	

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Fuel Economy Guide Gas Guzzler Report

Date: 10-MAR-97		CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)										PAGE:1			
Time: 04:56:33 PM		1996 ANNUAL CERTIFICATION TEST RESULTS													
		FEDERAL- LIGHT DUTY VEHICLES													
Manufacturer: 640 Matthews Motors		Evaporative Family: TAD1240BYMEV Evap System: 1 Displacement:16.9													
Engine Family: TAD2.8V8GFEM Engine System:1															
Car Line	Tested	Emission Control	Eng. disp	Trans	SL	ETW	HP	Ratio	Axle	Emission	50K MI	100K MI	50K MI	100K MI	Deterioration Factor
A6	8/10/20/99/		16.9	09	1	3750	7	4.33		HC-TOTAL-EV	2.1			1*	
A6	8/20/99//		16.9	09	1	3750	7	4.33		HC-TEV-2D-FED	2.0			1*	
										HC-TEV-3D-FED	1.2			1*	
										SPITBACK	0.3			1*	
A6	8/20/99//		16.9	09	1	3750	7	4.33		CO		1.2		.864*	
										CO			.935*		
										CO-ST2500				1*	
										CO-STI				1*	
										HC-NM		0.13		1.012*	
										HC-NM				1.024*	
										HC-ST2500				1*	
										HC-STI				1*	
										HC-TOTAL	0.14			1.018*	
										NOX	0.2			1.038*	
										NOX				1.078*	
A6	quattro	8/20/99//	16.9	09	1	4000	8.2	4.33		CO		1.4		.864*	
										CO			.935*		
										HC-NM		0.14		1.012*	
										HC-NM				1.024*	
										HC-TOTAL	0.15			1.018*	
										NOX	0.2			1.038*	
										NOX				1.078*	
A6	quattro Wagon	8/20/99//	16.9	09	1	4250	8.2	4.33		CO		1.4		.864*	
										CO			.935*		
										CO				.864*	
										CO		1.9		.935*	
										CO-GOLD	2.9			.935*	
										HC-NM	0.16			1.012*	
										HC-NM				1.024*	
										HC-TOTAL	0.18			1.018*	
										NOX	0.2			1.038*	
										NOX				1.078*	

Car Lines Covered: A6 quattro Wagon, A6 quattro, A6,

Annual Certification Test Results

**Emission Standards Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

EMISSION STANDARDS  
EXHAUST EMISSIONS REPORT

Date: 04-MAR-97  
Time: 04:30:38 PM

Model Year: 1997  
GVW Category: FHLDT  
Sales Area: FA  
Fuel Type: D

Ignition Type: C COMPRESSION  
Cert/In Use: C CERTIFICATION  
LWV Range: 3751-5750  
ALVW Range: N/A

Tier	Useful Life	Emission Short Name	Emission Preferred Name	Exhaust Standard	Additive DF Qty	Multipliative DF Qty	Phase In %
T1	50,000	HC-NM	NON-METHANE HC	.320	0.000	1.000	50
T1	50,000	CO	CARBON MONOXIDE	4.400	0.000	1.000	50
T1	120,000	HC-TOTAL	TOTAL HYDROCARBON	.800	0.000	1.000	50
T1	120,000	HC-NM	NON-METHANE HC	.460	0.000	1.000	50
T1	120,000	PM	PARTICULATE EMISSION	.100	0.000	1.000	50
T1	120,000	NOX	OXIDES OF NITROGEN	.980	0.000	1.000	50
T1	120,000	CO	CARBON MONOXIDE	6.400	0.000	1.000	50

Exhaust Emissions Standards Report

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

EMISSION STANDARDS  
EVAPORATIVE EMISSIONS REPORT

Date: 04-MAR-97  
Time: 04:26:36 PM

Model Year: 1997  
GVW Category: FHLDTA HEAVY LIGHT DUTY TRUCK A Sales Area: FA FEDERAL ALL ALTITUDE  
Fuel Type: G GASOLINE

Tier	Useful Life	Emission Short Name	Emission Preferred Name	Evaporative Standard	Additive DF Qty	Multiplicative DF Qty	Phase In %
ENHA ENHANCED STDS F	120,000	HC-TEV-2D-FED	HC TOTAL EV FOR FED 2 DAY	2.50	0.000	1.000	20
ENHA ENHANCED STDS F	120,000	HC-TEV-3D-FED	HC TOTAL EV FOR FED 3 DAY	2.00	0.000	1.000	20
ENHA ENHANCED STDS F	120,000	SPITBACK	SPITBACK	1.00	0.000	1.000	20

Evaporative Emissions Standards Report

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**Engine Systems Information / Evaporative/Refueling Systems Information  
(ESI/ErSI) Reports**





Date: 04-MAR-97  
 Time: 11:58:21 AM  
 CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 ENGINE SYSTEMS INFORMATION  
 ESI DATABASE REPORT

EMISSION SPECIFICATION AND DF SUMMARY

Model Year: 1994  
 Engine Family: R3G6.586DAAA  
 System Number: 1  
 Subsystem Number: 1  
 Subsystem Status: ACTIVE  
 Sales Area: FA FEDERAL ALL ALTITUDE  
 DF Type: 9 LDT SELF-APPROVED DF

Manufacturer: 40 MATTHEWS MOTORS  
 Actual Production: 0  
 Projected Sales: FLDT LIGHT DUTY TRUCK  
 GVW Category: FLDT  
 GVW Range:  
 LRV Range:  
 ALRV Range:

Cert/In Use:	C	CERTIFICATION	Useful Life:	120,000	Fuel Type:	D	DIESEL	Waiver Indicator	Emission Standard	Additive Term	Multiplicative Term
Tier:	T0	TIER 0									
EPA Standard	Phase	Non Compliance	Banking/Trading	Indicator	Averaging	Indicator	Standard <td></td> <td></td> <td></td> <td></td>				
CO	0	NO	NO	NO	NO	NO	10.	NO	0.0	0.0	1.03
NOX	0	NO	NO	NO	NO	NO	1.7	NO	0.0	0.0	1.018
PM	0	NO	NO	NO	NO	NO	0.13	NO	0.0	0.0	1.0
HC-TOTAL	0	NO	NO	NO	NO	NO	0.80	NO	0.0	0.0	1.11

Subsystem Comments:

ESI Emission Specification and DF Summary

Date: 18-NOV-96  
Time: 10:00:16 AM  
CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS) Page: 1

ESI  
SUBMISSION STATUS REPORT PART I  
DATA SUBMITTED

Manufacturer: 9001 SDC TEST Manufacturer 1  
Submission No: 81 Submission Date: 13-NOV-96 Submission Time: 04:02:53 PM

Trans No Record No Record Image  
-----  
1 1 E2A WXAXV3.10DDD 01 1 1998 FA 100000 6 FLDV V

No Errors

1 2 ESA G 01

No Errors

1 3 EGA 100 C T1 CO 4.2 80 1 .96 N N N N

No Errors

1 4 EGA 50 C T1 CO 3.4 80 1 .46 N N N N

No Errors

1 5 EGA 50 C N/A CO-COLD 1.0 80 1 .46 N N N N

No Errors

ESI Submission Status Report (Part 1)

Date: 18-NOV-96  
Time: 10:00:58 AM

Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

ESI  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 81      Submission Date 13-NOV-96      Submission Time: 04:02:53 PM

Record Type	Number of Records
E2	2
EG	16
ES	2
ET	6

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	2	2	0
Totals:	2	2	0

ESI Submission Status Report (Part 2)

Date: 04-MAR-97  
 Time: 04:45:31 PM  
 CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 EVAPORATIVE/REFUELLING SYSTEMS INFORMATION  
 EVSI DATABASE REPORT  
 Page:1

FAMILY SALES AND SYSTEM SUMMARY

Model Year: 1997      Manufacturer: 9008      Evaporative Family: VXH1123AYPA0  
 -----  
 Canister Work Capacity: 123      Housing  
 Vapor Storage System: 1 CANISTER      Bottom Indicator      Indicator      Purge Indicator  
 -----  
 Fuel Induction Indicator:2      1      N      CLOSED      P      PLASTIC      Y      YES  
 -----

Subsystem Information

System Information

System No: 1  
 No of Subsystems: 2  
 Comments:  
 A EVAPORATIVE DATA FOR MTDS FE MFP (GASOLINE, FEDERAL) A  
 ..... A 1 2 3 4  
 ..... 5 6 7 8  
 A45678901234567890123456789012345678901234567890123456789  
 012345678901234567890

Emission Related Components      Onboard Diagnostics      Onboard Diagnostics Display  
 -----  
 62 ELECTRONIC CONTROLS-DIGITAL      ~~70- EVAPORATIVE SYSTEM~~      ~~0- FAULT CODE NOT STORED, LIGHT ON~~  
 -----  
 99 OTHER

EvSI Family Sales and System Summary



CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 EVSI  
 SUBMISSION STATUS REPORT PART I  
 DATA SUBMITTED

Manufacturer: 9001 SDC TEST Manufacturer 1  
 Submission No: 47 Submission Date: 07-NOV-96 Submission Time: 12:00:48 PM

Trans No Record No Record Image  
 -----  
 1 1 P1A WXAXV0035008 01 2 1

No Errors

1 2 PFA 1 N P Y

No Errors

1 3 PMA G PLASTIC

No Errors

1 4 PDA 70 0

No Errors

1 5 PEA 15

No Errors

EvSI Submission Status Report (Part 1)

Date: 18-NOV-96  
Time: 10:09:22 AM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

Page: 1

EVSI  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 47      Submission Date 07-NOV-96      Submission Time: 12:00:48 PM

Record Type	Number of Records
P1	1
P2	2
PC	4
PD	1
PE	6
PF	1
PG	4
PM	1
PS	2
PT	8

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	3	2	1
Totals:	3	2	1

EvSI Submission Status Report (Part 2)

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## **General Label Reports**

UNITED STATES ENVIRONMENT PROTECTION AGENCY  
ANN ARBOR, MICHIGAN 48105  
OFFICE OF MOBILE SOURCES

-----  
March 10, 1997

Mr. Blandings, Project Manager  
MATTHEWS MOTORS Emission and Fuel Economy Division  
General Motors Proving Grounds  
Milford, MI 483803726

Dear Mr. Blandings:

We have received the 1996 model year fuel economy values listed on Enclosure I which you have approved. Based upon the date of receipt, the earliest date that these vehicles may be offered for sale is March 17, 1997.

This receipt should not be construed as an approval of these label values. We reserve the right to audit these calculations at a later time under the provisions of 40 CFR 600.312-86.

Sincerely Yours,

(Computer-Generated, No Signature Required)

Thomas M. Ball  
Vehicle Programs and Compliance  
Office of Mobile Sources

General Label Receipt Letter

CERTIFICATE AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 GENERAL LABEL  
 RECEIPT LETTER ENCLOSURE I REPORT

Date: 10-MAR-97  
 Time: 04:33:30 PM

Model Year: 1997      Index Number: 13      Release Date: 20-AUG-96      Approval Date:      Cyl: 6  
 Manufacturer: 640      MATTHEWS MOTORS  
 Engine Block Descriptor:      Fuel Injection Desc: M MULTI POINT  
 Combustion Cycle Desc: G OTTO CYCLE PISTON

Model Name	Adjusted		Estimated Range		Unadjusted Combined	Fuel Drive Cost System	Trans Drive Type	Over Drive	Transmission Descriptors
	City MPG	Hwy MPG	City	Hwy					
10 A4	18	28	15	21	25	F	L5	2	LKUP
10 A4	19	27	16	22	26	F	M5	2	
20 A4 quattro	18	27	15	21	24	4	L5	2	LKUP
20 A4 quattro	19	26	16	22	25	4	M5	2	

--

General Label Receipt Letter Enclosure I

CERTIFICATE AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

GENERAL LABEL

RECEIPT LETTER ENCLOSURE II REPORT

Range 1997 MPG by Comparable Class

Date: 10-MAR-97  
Time: 04:45:19 PM

Manufacturer: 9007 SDC TEST 7 Index Number: 100

Car Line Class	City	Comparable MPG Range	Highway
09 LARGE STATION WAGONS	111	111	222
13 STANDARD PICKUP TRUCKS 4 WHEEL D	111	111	222

General Label Receipt Letter Enclosure II

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 GENERAL LABEL  
 FUEL ECONOMY RANGE REPORT BY COMPARABLE CLASS  
 UPDATED RANGE FOR MODEL YEAR 1997 MPG

Date 10-MAR-97  
 Time 04:40:48 PM

Car Line Class	Estimated MPG Range	
	City	Highway
TWO SEATERS	7 38	11 45
MINISUBCOMPACT CARS	11 36	16 43
SUBCOMPACT CARS	7 51	12 57
COMPACT CARS	9 46	13 57
MIDSIZE CARS	9 44	13 55
LARGE CARS	9 25	11 36
SMALL STATION WAGONS	15 33	20 43
MIDSIZE STATION WAGONS	15 44	21 55
LARGE STATION WAGONS	28 45	35 50
SMALL PICKUP TRUCKS 2 WHEEL DRIVE	14 27	17 35
STANDARD PICKUP TRUCKS 2 WHEEL DRIVE	11 27	14 32
STANDARD PICKUP TRUCKS 4 WHEEL DRIVE	10 45	13 50
VANS, CARGO TYPE	11 20	12 27
VANS, PASSENGER TYPE	9 21	12 27
SPECIAL PURPOSE VEHICLE 2 WHEEL DRIVE	11 28	15 33
SPECIAL PURPOSE VEHICLE 4 WHEEL DRIVE	10 28	12 30

Fuel Economy Range Report By Comparable Class (Updated Range)

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

GENERAL LABEL

Date: 10-MAR-97  
Time: 04:38:16 PM

FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1997

CONFIGURATION CALCULATIONS

Release Date: 04-MAR-97 Index Number: 11  
 Manufacturer: 9007 SDC TEST 7 CID: 2 CYL: 2  
 Engine Block Descriptor: TEXT Fuel Injection: S SINGLE POINT  
 Combustion Cycle: R OTTO CYCLE ROTARY

D T	R R	V N	D	Transmission	Engine Code	Road Axle Ratio	Load HP	Vehicle ID	C A	City Fuel Economy	F V	Test Actual Average	Highway Fuel Economy		
F C4	4	EMS	MODE	FW	4000	3875	ABCDEF	GHIJKLH2	3.06	12.2	VI_TST_ORIG_VEH	0 A	1000081	25	25.9743
F C4	4	EMS	MODE	FW	4000	3875	ABCDEF	GHIJKLH2	3.06	12.2	VI_TST_ORIG_VEH	0 A	1000082	26	25.9743
F C4	4	EMS	MODE	FW	4000	3875	ABCDEF	GHIJKLH2	3.06	12.2	VI_TST_ORIG_VEH	0 A	1000083	27	25.9743
F C4	4	EMS	MODE	FW	4000	3875	ABCDEF	GHIJKLH2	3.06	12.2	VI_TST_ORIG_VEH	0 A	1000084	28	28

Sales For This Subconfiguration: 100000 Configuration Sales Weighted (By Subconfiguration)

Harmonically Averaged Fuel Economy

Fuel Economy

City:	25.9743	City:	25.9743
Highway:	28	Highway:	28
Combined:	26.8484	Combined:	26.8484

General Label Vehicle Configuration Calculations

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 GENERAL LABEL  
 FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1997  
 BASE LEVEL CALCULATIONS

Date: 10-MAR-97  
 Time: 04:21:29 PM

Release Date: 04-MAR-97  
 Manufacturer: 9007 SDC TEST 7  
 Engine Block Descriptor: TEXT  
 Combustion Cycle: R OTTO CYCLE ROTARY

Index Number: 11  
 CID: 2 CYL: 2  
 Fuel Injection Desc: S SINGLE POINT

Drv Sys	Trn Typ	Ov Dr	Transmission Dr	Engine Code	IWT	Axl Rat	Sales	Sls %	City FE			Highway FE			Combined FE			Total Base Sales
									Conf MPG	Base MPG	MPG	Conf MPG	Base MPG	MPG	Conf MPG	Base MPG	MPG	
F	C4	4	EMS MODE FW	3500 ABCDEFGHIJKLHJ	1.05	120000	100	25.9743	25.9743	28	28	26.8484	26.8484	120000				
F	C4	4	EMS MODE FW	4000 ABCDEFGHIJKLH2	3.06	100000	100	25.9743	25.9743	28	28	26.8484	26.8484	100000				
R	AV	4	EMS MODE FW	4000 ZZZZZZZZZZZZZZ	7.07	220000	100	35	35	29	29	32.0189	32.0189	220000				

-----  
 VEHICLE CONFIGURATION NOT TESTED  
 -----

Drv Sys	Trn Typ	Ov Dr	Transmission Dr	Engine Code	IWT	Axl Rat	Sales

General Label Base Level Calculations

Date: 10-MAR-97  
 Time: 04:03:15 PM  
 Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 GENERAL LABEL  
 FUEL ECONOMY CALCULATIONS FOR MODEL YEAR 1997  
 MODEL TYPE CALCULATIONS

Release Date: 17-SEP-96  
 Manufacturer: 470 Matthews Motors  
 Engine Block Descriptor: B204L3  
 Combustion Cycle: G OTTO CYCLE PISTON  
 Index Number: 3  
 CID: 121  
 CYL: 4  
 Fuel Injection Descriptor: M MULTI POINT  
 Engine Families: VSA2.0VJGKEK, VSA2.3VJGKEK, VSA2.5VJGFEK,

Car Line	S	P	I	n	Dr	Trns	Ov	Transmission	Dr	Descriptor	IWT	Sales	Sls %	Total Sales	City			Unadjusted Fuel Economy MPG		
															Base Level	Model Type	Highway	Base Level	Model Type	Combined
SAAB 900 CONVERTIBLE	F	L4	4	LKUP	3500	2000	100	2000	20	20	20	32.8	24.2604							
SAAB 900	F	L4	4	LKUP	3500	4000	100	4000	20	20	20	32.8	24.2604							
SAAB 900 CONVERTIBLE	F	M5	2	SIL	3500	1600	100	1600	21.7	21.7	21.7	35.2	26.2263							
SAAB 900	F	M5	2	SIL	3500	2400	100	2400	21.7	21.7	21.7	35.2	26.2263							

General Label Model Type Calculations



CERTIFICATE AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)										Page: 1	
GENERAL LABEL											
FUEL ECONOMY GUIDE FOR MODEL YEAR 1997											
EPA CALCULATED											
Date: 10-MAR-97											
Time: 04:23:40 PM											
Carline Class	04 COMPACT CARS										
Manufacturer:	640 Matthews Motors										
Engine Block Desc:	G OTTO CYCLE PISTON										
Combustion Cycle:	M MULTI POINT										
Division Name	Car Line Name	Average	Estimated MPG Annual	Drive Trans Over	TransmissionBody Passenger/Trunk	Interior Space					
		City	Hwy	Comb Fuel Cost	System Type	Drive Descriptor	Typeor Cargo(CU.FT.)				
-----											
Matthews Motors	A4	18	28	22	F	L5	2	LKUP	4D	88	14
		19	27	22	F	M5	2				
	A4 quattro	18	27	21	4	L5	2	LKUP	4D	88	14
		19	26	21	4	M5	2				

General Label Fuel Economy Guide (EPA Calculated)

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

Date: 10-MAR-97  
Time: 04:25:38 PM

GENERAL LABEL

FUEL ECONOMY GUIDE FOR YEAR 1997

MFR CALCULATED

Car line Class: 04 COMPACT CARS  
 Manufacturer: 640 Matthews Motors  
 Engine Block Descriptor:  
 Combustion Cycle: G OTTO CYCLE PISTON  
 Index Number: 13  
 CID: 169 CYL: 6  
 Fuel Injection Desc: M MULTI POINT

Division Name	Car Line Name	Estimated City MPG	Estimated Hwy Comb	Average Annual Fuel Cost		Unrounded Unadjusted City Hwy Comb	Optional Disp (CC/L)	Drive Type	Trans System	Approval Over Descriptor	Drive Date	
				Fuel Cost	Cost							
M. Motors	A4	18	28	22	20.3	35.4	25.122	2.8	F	L5	LKUP	2
M. Motors	A4	19	27	22	21.4	34.95	25.923	2.8	F	M5		2
M. Motors	A4 quattro	18	27	21	19.5	34.75	24.299	2.8	4	L5	LKUP	2
M. Motors	A4 quattro	19	26	21	20.6	33.5	24.918	2.8	4	M5		2

Legend

EPA Defined FE Value Discrepancy Flags (MHL)

- \* - MFR and EPA calculations match
- ? - No MFR calculation found
- H - MFR calculation high
- L - Calculation low

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 GENERAL LABEL  
 TEST CAR LIST  
 1997 FUEL ECONOMY PROGRAM  
 V.I. REPORT

Date: 10-MAR-97  
 Time: 04:28:57 PM

Manufacturer Name: 9007 SDC TEST 7 Engine Block Descriptor: TEXT

Carline Name	Vehicle ID	C		Disp	HP	Control Systems		Dr. Trns	ETW	Comp	Axle	N/V	
		F	G			Exhaust	Evap						Sys.typ
-----													
Newly Tested Vehicles													
SUBCOMP 2 DR	VI_TST_ORIG_VEH	0	3.2	260	///	/102		1	01	4000	10.4	2.15	50.1
SUBCOMP 2 DR	VI_TST_ORIG_VEH	0	3.2	260	///	/102		1	01	4000	10.4	2.15	50.1
-----													
Previously Tested Vehicles													
SUBCOMP 2 DR	VI_TST_ORIG_VEH	0	3.2	260	///	/102		1	01	4000	10.4	2.15	50.1
SUBCOMP 2 DR	VI_TST_ORIG_VEH	0	3.2	260	///	/102		1	01	4000	10.4	2.15	50.1

TESTS REPORT

Vehicle ID	C	Act.	A	V	G	Cty	Wt.	Hwy	I	L	HC	CO	CO2	NOX	PM	HC	Highway Emissions (Grams/Mile)			Unadjusted Hwy MPG
																	CO	CO2	NOX	
-----																				
Newly Listed Test Vehicles																				
VI_TST_ORIG_VEH	0	Y	34	A	.65	A	.65	.65	2	.01	.05	231.1	.0101	45.3	.01	.05	231.1	.01005	55.5	49.3842
VI_TST_ORIG_VEH	1	Y	34	A	.35	A	.35	.35	2	.01	.05	231.1	.0101	40.1	.01	.05	231.1	.01005	54.1	45.4677
VI_TST_ORIG_VEH	Y	34	A	.35	A	.35	.35	.35	2	.01	.05	231.1	.0101	40.2	.01	.05	231.1	.01005	54.1	45.4677
VI_TST_ORIG_VEH	Y	35	A	.35	A	.35	.35	.35	2	.01	.05	231.1	.0101	40.2	.01	.05	231.1	.01005	54.1	45.4677
VI_TST_ORIG_VEH	Y	35	A	.35	A	.35	.35	.35	2	.01	.05	231.1	.0101	40.2	.01	.05	231.1	.01005	54.1	45.4677

General Label Test Car List

Date: 10-MAR-97  
Time: 02:15:36 PM  
Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
GENERAL LABEL  
SUBMISSION STATUS REPORT PART I  
DATA SUBMITTED

Manufacturer: 9007 SDC TEST 7  
Submission No: 971 Submission Date: 10-MAR-97 Submission Time: 12:53:33 PM

Trans No Record No Record Image  
-----  
1 1 GIA9007 400 1997 003 12 H M 13 Y 08 RE-PLACED N 04041997

Error Message(s):  
GL\_Det\_Gas\_Guz 37-(Did not find 3000 IWT Sales and FE. Substituting zero for both. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Did not find 4000 IWT Sales and FE. Substituting zero. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Found null 4000 ETW sales. Substituting zero. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Did not find 3000 IWT Sales and FE. Substituting zero for both. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Found null 4000 ETW sales. Substituting zero. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Did not find 3000 IWT Sales and FE. Substituting zero for both. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Found null 4000 ETW sales. Substituting zero. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)  
GL\_Det\_Gas\_Guz 37-(Did not find 3000 IWT Sales and FE. Substituting zero for both. ) CROSS DATA DEPENDANCY ( Verify data in GT record.)

1 2 G2 01 M3 F 1 Y Y V N N  
No Errors  
1 3 G2 02 L3 4 2 N N 9 V Y  
No Errors

General Label Submission Status Report (Part 1)

Date: 10-MAR-97  
Time: 02:16:23 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
GENERAL LABEL  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9007 SDC TEST 7  
Submission No: 971 Submission Date 10-MAR-97 Submission Time: 12:53:33 PM

Record Type	Number of Records
G1	19
G2	32
G3	16
GF	64
GL	64
GM	64
GR	64
GT	96

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	16	15	1
D	1	1	0
R	1	1	0
S	1	1	0
Totals:	19	18	1

General Label Submission Status Report (Part 2)

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**EPA/Manufacturer Test Data System Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 MANUFACTURER/EPA TEST DATA  
 MANUFACTURER EMISSION TEST DATA REPORT

Date: 04-MAR-97  
 Time: 12:14:18 PM

VEHICLE IDENTIFICATION

Model Year: 1997  
 Vehicle ID: MTDS TEST VEH  
 Running Change: 04  
 Trans Cnfg: M-5 MANUAL FIVE SPEED

Manufacturer: 9010 Appel Motors Inc  
 Vehicle Cnfg: 0  
 ETW: 4000

MANUFACTURERS EMISSION TEST DATA

Test Number: 1000254  
 Test Procedure: HWFE  
 High Altitude: N  
 Average Code: 1  
 Lab Site: DS1  
 Dyno Site: 4110  
 System Miles: 99.99 KPA  
 Barometric Press: FUELET  
 Fuel Batch ID: 1  
 Quick Check: N  
 Wait Time: N  
 Precondition Type: EES1  
 Calculated DF: N  
 Confirmation: N

Test Date: 03-MAR-97  
 Test Purpose: 31 FUEL ECONOMY  
 Tech Disposition: 91 INTERNAL VALID  
 Group Code:  
 Analysis Site: TAS1  
 Odometer Reading: 4154 M  
 Ambient Temp: 99.9 F  
 NOX Factor: 1.9999  
 Fuel Calib No: 1  
 Warm Up Time:  
 Retest Code: N  
 Restarts:  
 Evap Encl Site: EES1

Comments: MTDS PROCEDURE UNROUNDED UNADJUSTED FE MEASURED FUEL PROPERTIES, MFR 9010 10 20 30  
 40 50 60 70 80  
 34567890123456789012345678901234567890123456789012345678901234567890

Measured Fuel Properties

Veh Fuel Type: 6 UNLEADED(AT EPA 96 RON)  
 Effective Date: 27-JUN-66  
 Ineffective Date: 27-JUN-97  
 Calibration Date: 27-JUN-96  
 CWF NMHC:  
 CWF HC:  
 Exhaust CWF:  
 Methanol Vol Frac:  
 Fuel Density: 6.1  
 Specific Gravity: .749  
 Net Heating Value: 18366  
 Fuel Blend CWF: .87  
 CO2 Wt Fraction:

Unrounded Emission Results  
 Emission Name Test Results  
 HC-TOTAL 0.0180000  
 CO 0.4000000  
 CO2 206.00000  
 NOX 0.01  
 FE-RND-ADJ 43.5

Manufacturer Emission Test Data Report



Date: 05-MAR-97  
Time: 03:46:05 PM  
CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
MANUFACTURER/EPA TEST DATA  
PASS/FAIL RESULTS  
1997 MODEL YEAR CALCULATED RESULTS  
Page: 1

VEHICLE IDENTIFICATION

Model Year: 1997  
Manufacturer: 9008 stc test mfr 9008  
-----  
Vehicle ID: MTDS DIESEL VEH  
Cert Disposition: 18 NO DISPOSITION  
Vehicle Cnfg: 0  
FE Disposition: 78 NO DISPOSITION  
Test Number: 1000060  
Tech Disposition:  
-----  
Test Purpose: 31 FUEL ECONOMY  
-----

Pass/Fail Report

CERTIFICATE AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 MANUFACTURER/EPA TEST DATA  
 CARRY OVER/CARRY ACROSS REPORT

Date: 05-MAR-97  
 Time: 02:34:57 PM

Manufacturer: 9004 Matthews Test Company, Inc Vehicle ID: 9004-VEH-1

Chfg #	Years Act	Carry-Over From	To	Type	Sales Area	Engine Family Name	Deterioration Factor	Type	# Test	Test Numbers
0	1997	1998	ENG9004-1	FA CA	VXD2.5VJGAAA	STANDARD	AMA/DDV	FULL MILEAGE	10	1000292 1000293 1000294 1000295 1000296 1000303 1000304 1000305 1000306 1000307
0	1998	1997	ENG9004-98-1	FA CA	WXDXV2.50A98	STANDARD	AMA/DDV	FULL MILEAGE	5	1000292 1000293 1000294 1000295 1000296
2	1997	1998	ENG9004-1	FA CA	VXD2.5VJGAAA	STANDARD	AMA/DDV	FULL MILEAGE	4	1000293 1000294 1000295 1000296

Carry Over/Carry Across Report

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 MFR TEST DATA SYSTEM  
 SUBMISSION STATUS REPORT PART I  
 DATA SUBMITTED

Date: 18-NOV-96  
 Time: 10:18:35 AM

Manufacturer: 9001 SDC TEST Manufacturer 1  
 Submission No: 65 Submission Date: 08-NOV-96 Submission Time: 09:18:07 AM

Trans No Record No Record Image  
 -----  
 1 1 T1A9001 1997 VI\_TST\_VEH\_6 0 01 02 05161996 1 01 01

No Errors

SDC-01 0001 06

No Errors

1 3 T4 01011996 12121998 01011996

No Errors

1 4 TR HC-ORVR 0010.9876543

No Errors

1 5 TR NOX 9876.5432101

No Errors

Date: 18-NOV-96  
Time: 10:19:48 AM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
MFR TEST DATA SYSTEM  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 65      Submission Date 08-NOV-96      Submission Time: 09:18:07 AM

Record Type	Number of Records
T1	3
T2	3
T4	3
TC	4
TR	4

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	3	3	0
Totals:	3	3	0

## **Shift Schedule Reports**

Date: 18-NOV-96  
 Time: 11:23:34 AM  
 CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 SHIFT SCHEDULE  
 DATABASE REPORT

Database: A MANUFACTURER  
 Manufacturer: 9001 SDC TEST Manufacturer 1  
 Entry Date/Time: 10/31/96 13:32:32  
 Update Date/Time: 10/31/96 13:32:32  
 LMS Error:  
 Shift Schedule Comments: SS\_2.23\_0\_9012.DAT THIS IS FIRST OF THREE SHIFT SCHEDULES MODEL YEAR INPUT CARD, S8,  
 Drive Schedule Name(s): 002 TFTP (CERT)AFTER YEAR, TO ALLOW FOR KNOWN PROBLEM. THIS, MUST CHANGE THIS INPUT DATA  
 Certification Model Year(s): 1997R. 10 20 30 40 50 60 70  
 34567890123456789012345678901234567890123456789012345678901234567890

Shift Schedule: 0001 1ST SCHED: FOR MTDS TESTING  
 Data Originator: 01 MANUFACTURER

Cruise Indicator	Gear Number	Cert Speed	Mean Calculated	Minimum Calculated
C	Declutch	99.9		
	1 - 2	12.9		
	2 - 3	21.0		
	3 - 4	31.9		
	4 - 5	47.5		
	5 - 6	99.9		
N	Declutch	14.7		
	1 - 2	15.0		
	2 - 3	25.8		
	3 - 4	40.0		
	4 - 5	99.9		
	5 - 6	99.9		

Shift Schedule Database Report

Date: 18-NOV-96  
 Time: 11:25:11 AM  
 CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 SHIFT SCHEDULE  
 DATABASE REPORT

Database: A MANUFACTURER  
 Manufacturer: 9001 SDC TEST Manufacturer 1 Shift Schedule: 0001 1ST SCHED: FOR MTDS TESTING

SHIFT POINTS

Shift Point	Shift Time	Shift Speed	Shift Action	Horizontal/ Vertical	Left/ Right	Exception Point	Cruise Point	Shift Point	Comments
1	25.3	15.0	12						
2	47.0	22.7	23						
3	111.3	31.9	34						
4	120.2	14.7	40						
5	167.6	15.1	12						
6	172.0	25.8	23						
7	187.0	17.2	32						
8	195.6	35.1	23						
9	198.6	40.0	34						
10	205.0	47.5	45						
11	327.2	14.9	50						
12	351.3	15.1	12						
13	356.5	25.9	23						
14	365.0	34.5	34						
15	391.9	14.8	40						

Shift Schedule Shift Points Report

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 SHIFT SCHEDULE  
 MANUFACTURER SUMMARY REPORT

Database: A MANUFACTURER Manufacturer: 9001 SDC TEST Manufacturer 1

Date: 18-NOV-96  
 Time: 10:28:03 AM

Shift Schedule	Entry Date	Update Date	LNS Error
0001 1ST SCHED: FOR MTDS TESTING Drive Schedule Name(s): 002 FTP (CERT) Cert Model Year(s): 1997	10/31/96 13:32:3	10/31/96 13:32:32	
0002 2ND SCH FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	10/31/96 13:33:0	10/31/96 13:33:08	
0003 3RD SCHED FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	10/31/96 13:33:2	10/31/96 13:33:23	
0004 1ST SCHED: FOR MTDS TESTING Drive Schedule Name(s): 002 FTP (CERT) Cert Model Year(s): 1997	11/07/96 09:28:0	11/07/96 09:28:07	
0005 2ND SCH FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	11/07/96 09:28:1	11/07/96 09:28:16	
0006 3RD SCHED FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	11/07/96 09:28:2	11/07/96 09:28:22	
0007 1ST SCHED: FOR MTDS TESTING Drive Schedule Name(s): 002 FTP (CERT) Cert Model Year(s): 1997	11/07/96 14:47:4	11/07/96 14:47:43	
0008 2ND SCH FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	11/07/96 13:05:2	11/07/96 13:05:24	
0009 3RD SCHED FOR MTDS TEST Drive Schedule Name(s): 003 HWFE (CERT) Cert Model Year(s): 1997	11/07/96 13:05:2	11/07/96 13:05:29	

Shift Schedule Manufacturer Summary Report



Date: 18-NOV-96  
Time: 10:31:11 AM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SHIFT SCHEDULE  
SUBMISSION STATUS REPORT PART I  
DATA SUBMITTED

Manufacturer: 9001 SDC TEST Manufacturer 1  
Submission No: 80 Submission Date: 13-NOV-96 Submission Time: 03:45:08 PM

-----  
Trans No Record No Record Image  
-----  
1 1 S1 M A90010001 1ST SCHED: FOR MTDS TESTING  
-----

Error Message(s):  
SH\_Cert 51-(Replace or Modify is an ) INVALID PROCESS CODE ( Data for this Test support a Certification an are Locked)  
SH\_Cert 51-(Replace or Modify is an ) INVALID PROCESS CODE ( Data for this Test support a Certification an are Locked)  
SH\_Cert 51-(Replace or Modify is an ) INVALID PROCESS CODE ( Data for this Test support a Certification an are Locked)  
SH\_Cert 20-ORACLE ERROR (ORA-01422: exact fetch returns more than requested number of rows)  
SH\_Cert 20-ORACLE ERROR (ORA-01422: exact fetch returns more than requested number of rows)  
SH\_Cert 20-ORACLE ERROR (ORA-01403: no data found)  
SH\_Test\_Performed 30-USED IN TEST, CAN NOT CHANGE FIELD

1 2 S8 1998  
Error Message(s):  
SH\_Cert 20-ORACLE ERROR (ORA-01403: no data found)

1 3 ZZ  
Error Message(s):  
CO\_Process\_Trans 2-TRANSACTION REJECTED

Shift Schedule Submission Status Report (Part 1)

Date: 18-NOV-96  
Time: 10:31:48 AM

Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SHIFT SCHEDULE  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 80 Submission Date 13-NOV-96 Submission Time: 03:45:08 PM

Record Type	Number of Records
S1	3
S8	3

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
M	3	0	3
Totals:	3	0	3

Shift Schedule Submission Status Report (Part 2)

```
S1 A90100003 3RD SCHED FOR MTDS TEST
S2 01
S3 14.8 15.0 99.9 37.3 99.9 99.9
S4 99.9 99.9 34.1 35.1 44.7 99.9
S5
S6
S7 003
S8 1996
S8 1997
S8 1998
SC SS_23_0_9010.DAT. THIS IS THIRD SHIFT SCHEDULE, MODEL YR 1998 MODEL YEAR INP
SCUT CARD, S8, HAS TWO SPACES AFTER YEAR, TO ALLOW FOR KNOWN PROBLEM. THUS, MUS
SCT CHANGE THIS INPUT DATA LATER. 10 20 30 40 50
SC 60 70 3456789012345678901234567890123456789012345678901234567890123
SC4567890
SP 1 7.2 15.0 12
SP 2 22.0 34.1 23
SP 3 25.0 35.1 34
SP 4 60.7 44.7 45
SP 5 296.0 28.4 53
SP 6 301.9 37.3 34
SP 7 312.0 44.7 45
SP 8 755.1 14.8 50
SP 9 787.2 15.0 12
SP 10 802.0 34.1 23
SP 11 805.0 35.1 34
SP 12 840.7 44.7 45
SP 13 1076.0 28.4 53
SP 14 1081.9 37.3 34
SP 15 1092.0 44.7 45
SP 16 1535.1 14.8 50
ZZ
```

Shift Schedule TSD Report

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**Summary Sheet Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SUMMARY SHEET  
ESI/EVSI REPORT

Date: 08-MAR-96  
Time: 11:18:17 AM

Summary Sheet Version Number:  
Certificate Number:  
Vehicle Manufacturer:  
Model Year:  
-----  
Summary Sheet Index Number:  
Issue Date:  
Engine Manufacturer:  
Summary Sheet Sales Area:  
-----

Engine Family Specifications

Engine Family:  
Federal OBD:  
California OBD:  
Displacement:  
Alternate Displacements:  
Fuel System:  
Ignition Type:  
-----  
Engine System:  
Combustion Cycle:  
Valves Per Cylinder:  
Catalyst Type:  
Trap Type:  
Turbo/Super Charger:  
Components

Evaporative Family Specifications

Evaporative Family:  
Canister Work Capacity:  
Vapor Storage System:  
Fuel Tank Material:  
-----  
Evaporative System:  
Bottom Indicator Code:  
Housing Indicator Code:  
Purge Indicator Code:

Summary Sheet ESI/EVSI Report



Date: 05-MAR-97  
Time: 09:05:25 AM

UNITED STATES ENVIRONMENT PROTECTION AGENCY  
ANN ARBOR, MICHIGAN 48105  
1997 MODEL YEAR

CERTIFICATE OF CONFORMITY  
WITH THE CLEAR AIR ACT OF 1990 ISSUED TO:

Page: 1  
OFFICE OF  
MOBILE SOURCES  
DUPLICATE

-----  
Matthews Test Company, 9004LDV02 01/02/1996 03/04/1997  
-----  
Manufacturer Name Certificate Number Effective Date Signed By Jane Armstrong Issue Date  
Director Vehicle Programs  
and Compliance Division

-----  
Engine Family: VXD2.5VJGAAA Evaporative/Refueling Family: VXD1090BYMAA  
System Number: 1 System Number: 1

Engine Displacement: 2.5 Fuel Type: GASOLINE

Emission Related Systems: 3-WAY+CL (HEATED O2 + FEEDBACK), OTHER,  
PORTED EGR,

MULTIPLE POINT FUEL INJECTION,

Evap Emission Control Systems: CANISTER,

Model Covered: MTC Division - 2, SUB COMPACT 2 DOOR CAR

-----  
Pursuant to section 206 of the Clean Air Act (42 U.S.C.7525) and 40 CFR Part 86, this certificate of conformity is hereby issued with respect to test vehicles which have been found to conform to the requirements of the regulations on Control of Air Pollution from New Motor Vehicle Engines (40 CFR Part 86) and which represent the new motor vehicle models listed above by engine family and evaporative/refueling emission family, more fully described in the application of the above named manufacturer. Vehicles covered by this certificate have demonstrated compliance with applicable emission standards at high and low altitudes as more fully described in the manufacturer's application. This certificate covers the above models, which are designed to meet emission standards specified in 40 CFR 86.090-8 and 40 CFR 86.097-9 as applicable, at both high and low altitude as specified in the manufacturer's application.



This certificate of conformity covers only those new motor vehicles or new motor vehicle engines which conform, in all material respects, to the design specifications that applied to those vehicles or engines described in the documentation required by 40 CFR Part 86 and which are produced during the 1997 model year production period stated on this certificate of the said manufacturer, as defined in 40 CFR Part 86.

Catalyst-equipped vehicles designed to be operated on gasoline or flexible fuel are equipped with an emission control device which the Administrator has determined will be significantly impaired by the use of leaded fuel. This certificate is issued subject to the conditions specified in 40 CFR 80.24. Catalyst-equipped vehicles designed to be operated on gasoline or flexible fuel, otherwise covered by this certificate, which are driven outside the United States, Canada, Mexico, Japan, Australia, Taiwan and the Bahama Islands will be presumed to have been operated on leaded fuel resulting in deactivation of the catalysts. If these vehicles are imported or offered for importation without retrofit of the catalyst, they will be considered not to be within the coverage of this certificate unless included in a catalyst control program operated by a manufacturer or a United States Government Agency and approved by the Administrator.

In the case of completely assembled vehicles, this certificate of conformity covers only vehicles which are completely manufactured prior to January 1, 1998. Normally incompletely assembled vehicles (such as cab chassis) may be completed after this date, provided that the basic manufacturing (including installation of the emission control system) was completed prior to January 1, 1998. This certificate does not cover vehicles or engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

Summary Sheet Certificate Summary (cont.)

Date: 05-MAR-97  
Time: 02:47:08 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SUMMARY SHEET  
SUBMISSION STATUS REPORT PART I  
DATA SUBMITTED

Page: 1

Manufacturer: 9002 SDC TEST MANUFACTURER #2  
Submission No: 311 Submission Date: 18-FEB-97 Submission Time: 11:32:14 AM

Trans No Record No Record Image  
-----  
1 1 XIA9002 VXB3.0VJGAAA 01 VXB1057BYMAA 01 LDV

No Errors

1 2 X2 9002 02 5 FA L4 R

No Errors

1 3 XC THIS IS DUMMY RECORD CREATED FOR TESTING BY THE SDC.

No Errors

1 4 XC THIS IS A SECOND DUMMY COMMENT RECORD.

No Errors

1 5 XT 1000020

No Errors

1 6 XT 1000040

No Errors

Summary Sheet Submission Status Report (Part 1)

Date: 05-MAR-97  
Time: 02:48:24 PM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SUMMARY SHEET  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Page: 1

Manufacturer: 9002 SDC TEST MANUFACTURER #2

Submission No: 311 Submission Date 18-FEB-97 Submission Time: 11:32:14 AM

Record Type	Number of Records
X1	1
X2	1
XC	2
XT	2

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	1	0	1
Totals:	1	0	1

Summary Sheet Submission Status Report (Part 2)



CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
SUMMARY SHEET  
DATABASE REPORT

Date: 05-MAR-97  
Time: 09:59:27 AM

Summary Sheet Version Number: 0  
Summary Sheet Index Number: 303001  
Model Year: 1996  
Vehicle Manufacturer: 30 Matthews Motors  
Engine Manufacturer: MM Matthews Motors  
Issue Date: 00-00-00

Summary Sheet Sales Area: FA FEDERAL ALL ALTITUDE

-----

Engine Family Specifications

Engine Family:	TFM3.0V8NFGK	Engine System:	1
Federal OBD:	Y OBD	California OBD:	2 CARB OBD II
Catalyst Type:	3 3-WAY CATALYST	Trap Type:	
Turbo/Super Charger:		Ignition Type:	
Displacement:	3	Fuel System:	8 ELECTRIC MPI - SEQUENTIAL
Combustion Cycle:	2	Alternate Displacements:	
Values per Cylinder:	15 3-WAY+CL (HEATED O2 + FEEDBACK)		
Components:	35 OTHER ACTIVATED EGR		
	41 MULTIPLE POINT FUEL INJECTION		
	62 ELECTRONIC CONTROLS-DIGITAL		
	99 OTHER		

Summary Sheet Database Report

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)

SUMMARY SHEET  
DATABASE REPORT

Date: 05-MAR-97

Time: 04:54:03 PM

EMISSION DATA VEHICLES

Summary Sheet Version Number: 0 Vehicle Manufacturer: 9002 SDC TEST MANUFACTURER #2  
 Summary Sheet Index Number: 9002LDV01 Engine Manufacturer: XB SDC TEST MANUFACTURER #2  
 Engine Family: VXB3.0VJGAAA Certificate Number: CA CALIFORNIA  
 Engine System: 1 Sales Area: CA  
 Evaporative Family: VXB1057BYMAA Test Procedure Code: 2 CVS 75-LATER  
 Evaporative System: 1

Vehicle ID: SPCR TEST VEH 2 Transmission:  
 Vehicle Model: SDC TEST CAR 2 Engine Code: SPCRTEST  
 Fuel: G GASOLINE Axle Ratio: 3.92  
 Displacement: 296 N/V Ratio: 37.9  
 Rated HP: 210 Compression Ratio: 10.5  
 Test Weight: 3875 Dynamometer Power Absorption:  
 Running Change: Altitude:  
 Carry Over: Test Number: 1000211

Useful Life	Emissions	Result	Additive DF	Multiplicative DF	Certification Level		
					Emission Standard	Tier	
100,000	CO	1.5000000	0.000000	1.198	1.8000	4.2000	T1
100,000	HC-NM	0.1500000	0.000000	1.076	0.2000	0.3100	T1
100,000	NOX	0.3000000	0.000000	1.000	0.3000	0.6000	T1
50,000	CO	1.5000000	0.000000	1.095	1.6000	3.4000	T1

Summary Sheet Database Report (Emission Data Vehicles)

VEHICLES COVERED BY CERTIFICATE

Summary Sheet Version Number:	0	Vehicle Manufacturer:	30	Matthews Motors
Summary Sheet Index Number:	303001	Engine Manufacturer:	MM	Matthews Motors
Engine Family:	TFM3.0V8NFGK	Engine System:	1	
Evaporative Family:		Evaporative System:		

  

Carline	Sales Area Code and Description
20	TAURUS
	FA
	FEDERAL ALL ALTITUDE

---

Summary Sheet Database Report (Vehicles Covered by Certificate)

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**Vehicle Information (VI) Reports**

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
VEHICLE INFORMATION  
DATABASE REPORT

Date: 04-MAR-97  
Time: 01:36:55 PM

Manufacturer: 9010 Appel Motors Inc  
Vehicle ID: MTDS TEST VEH  
Division: 3 division 3 appel motors  
Model: 1 REAR DRIVE STR LEFT  
Drive: 01 MANUFACTURER TEST VEHICLE  
Source: VXX2.0VJGKEK  
Engine Family: VXX1123AYPA0  
Evap Family: 1

-----  
Engine Information  
-----

Configuration: 0  
Model Year: 1997  
Carline: 8 CORSICA ADD 3.1.1  
Actual Model: MTDS FE CALCULATION  
Model Year From/To: 03 CERT FUEL ECONOMY  
Vehicle Purpose: 03  
Engine Family Sys: 1  
Evap Family Sys: 1

-----  
Control Systems  
-----

Exhaust: 2 ENGINE MODIFICATION  
Evaporative: 2  
Tire  
Manufacturer: MTDS TST MF  
Construction: 2 RADIAL  
Size: TIRE RIM  
Pressure Front: 32  
Pressure Rear: 32  
Pressure Units:  
Odometer Correction  
Sign: -  
Initial: 0  
Factor: .989  
Units: M

Engine Code: HC-TOTAL-EV  
Engine Type: 01 OTTO SPARK  
Crankcase System: 1  
Cylinders: 8  
Valves/Cylinder: 2  
Displacement: 396.9 M CUBIC CENTIMETERS OR MILLIMETER  
Rated HP: 260  
Compression Ratio: 10.4  
Ignition Timing  
# 1: 2  
# 1 Before/After: BEFORE  
RPM: 260  
RPM Tolerance: 123  
Degree Tolerance: 6  
Gear: N NEUTRAL  
Idling  
RPM: 370  
RPM Tolerance: 195  
Gear: N NEUTRAL  
A/C: YES

Vehicle Information Database Report

```

Evaporative
Emission Name      Canister Type      Canister Bed Vol      Canister Working Cap      No of Alt Canister Loading Rate      Catalyst Preheating Method
HC-TOTAL-EV      E  EVAPORATIVE      111          333          1          0          NONE
-----
Fuel System Mfr/Model      Main Tank Capacity      Auxiliary Tank Capacity      Fuel Type
FUELSYSMDL      12  GALLONS      15  GALLONS      G  GASOLINE
-----
Test Procedure Fuel
Test Fuel SS      TP  TP Side AC      ETW      Dyno Dyno Dyno      ElecDyno ElecDyno ElecDyno
Proc Type DB ID SIL ID DD ID Fan HP      CoastDn CoastDn HP      Eq      Coeff A Coeff B Coeff C Coeff A Coeff B Coeff C
3  6  A 0001 2      N  N      N  N      34  B      29.18      .7871      .02018      9.02      .3801      .02265
-----
    
```

**NOTE:** Testing at the manufacturers' test lab determines the input for Dyno HP and Electric Dyno Coefficients.

If an electric dynamometer is used:  
 - both target and set coefficients are required. Dyno HP is optional.

If a twin roll (mechanical-hydro-kinetic) dynamometer is used:  
 - the dyno HP values must be entered.

Date: 18-NOV-96  
 Time: 10:37:00 AM  
 Page: 1

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
 VEHICLE INFORMATION  
 SUBMISSION STATUS REPORT PART I  
 DATA SUBMITTED

Manufacturer: 9001 SDC TEST Manufacturer 1  
 Submission No: 64 Submission Date: 08-NOV-96 Submission Time: 09:18:06 AM

Trans No Record No Record Image  
 -----  
 1 1 VIA 9001 01 10 VI\_TST\_VEH\_6 0 VEH-9001-TEST-6 1 1997 01 01

No Errors

1 2 V2 3725 4000 P 2000 396.9 M 260 01 8 2 10.4 2 B 260 123

No Errors

1 3 V36 N 1000 100 N Y VI\_TEST\_1 VXA3.1VJGDD 1 002 102

No Errors

1 4 V4VXAV1111001 1 1535 1675 0 P FA

No Errors

1 5 VFA G TEST01 12 15 G

No Errors

1 6 VPA HC-ORVR E 12010 2309 04 15 3

No Errors

Vehicle Information Submission Status Report (Part 1)

Date: 18-NOV-96  
Time: 10:37:58 AM

CERTIFICATION AND FUEL ECONOMY INFORMATION SYSTEM (CFEIS)  
VEHICLE INFORMATION  
SUBMISSION STATUS REPORT PART II  
SUMMARY STATISTICS

Page: 1

Manufacturer: 9001 SDC TEST Manufacturer 1

Submission No: 64 Submission Date 08-NOV-96 Submission Time: 09:18:06 AM

Record Type	Number of Records
V1	1
V2	1
V3	1
V4	1
V5	1
VC	2
VF	1
VP	1
VT	3

Transaction Type	Transactions Submitted	Transactions Accepted	Transactions Rejected
A	1	1	0
Totals:	1	1	0

Vehicle Information Submission Status Report (Part 2)

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