





**Audit Inspection Report**  
**Module 3 – Analyzer Gas Audit**

Facility Name \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ am pm  
 Facility Address \_\_\_\_\_ Facility Number \_\_\_\_\_  
 Test System Number \_\_\_\_\_ Serial Number \_\_\_\_\_  
 Software Version Number \_\_\_\_\_ Auditor Name \_\_\_\_\_

		Initial test			Retest after calibration of the analyzer			
P	F	Check	Standard (S)	Allowed error	High limit	Measured	Low Limit	
		Leak check fails uncapped						
		Leak check passes capped						
		Zero air	HC ppm					
			CO %					
			CO2 %					
			NO ppm					
			O2					
		O2	O2					
		Low	HC ppm					
			CO %					
			CO2 %					
			NO ppm					
		Mid #1	HC ppm					
			CO %					
			CO2 %					
			NO ppm					
		Mid #2	HC ppm					
			CO %					
			CO2 %					
			NO ppm					
		High	HC ppm					
			CO %					
			CO2 %					
			NO ppm					

Comments: \_\_\_\_\_  
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 \_\_\_\_\_

Auditor \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_









**Audit Inspection Report**  
**Module 8 – OBDII Tester Audit**

Facility Name \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ am pm  
 Facility Address \_\_\_\_\_ Facility Number \_\_\_\_\_  
 Test System Number \_\_\_\_\_ Serial Number \_\_\_\_\_  
 Software Version Number \_\_\_\_\_ Auditor Name \_\_\_\_\_

P	F	Checks									
		Power to On time:									
		On to Run time:									
		Protocol:									
		OBD Level:									
		I/M Monitors	Set			Read					
			Complete	Not Complete	Unsupported	Complete	Not Complete	Unsupported			
		Misfire									
		Fuel System									
		Component									
		Catalyst									
		Heated Catalyst									
		EVAP System									
		Secondary Air									
		A/C Sys Refrig									
		Oxygen Sensor									
		O2 Sensor Heater									
		EGR System									
		MIL	ON		OFF		ON		OFF		
		Commanded									
		DTC's	Set			Read					
		1									
		2									
		3									
		4									
		5									
		6									

Comments: \_\_\_\_\_  
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Auditor \_\_\_\_\_  
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 Signature \_\_\_\_\_ Date \_\_\_\_\_



**Audit Inspection Report**  
**Module 9 – Flow and Dilution VMAS Audit**

Facility Name \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ am pm  
 Facility Address \_\_\_\_\_ Facility Number \_\_\_\_\_  
 Test System Number \_\_\_\_\_ Serial Number \_\_\_\_\_  
 Software Version Number \_\_\_\_\_ Auditor Name \_\_\_\_\_

P	F	Hose Off Flow Check		
		Factory Flow Rate (ACFM)	Measured Flow Rate (ACFM)	% Difference

P	F	Dilute O2 Sensor Check							
		Check	Cylinder Conc. (%)	Conc. at 60 sec	Conc. at 65 sec	Conc. at 70 sec	High Limit (Cyl + 0.3)	Avg. Analyzer Conc. (%)	Low Limit (Cyl - 0.3)
		15% O2							
		8% O2							

P	F	SAO Annual Flow Audit				
		Barometric pressure (inches Hg):				
		Ambient temperature (degrees C):				
		SAO calibration constant (SAO <sub>c</sub> ):				
		Trial #	Manometer Pressure (inches of water)	VMAS Flow (SCFM)	SAO Flow (SCFM)	% Difference
		1- Max flow				
		2 - Approx 225 SCFM				
		3- Mid-point				

Comments: \_\_\_\_\_  
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Auditor \_\_\_\_\_  
 Signature \_\_\_\_\_ Date \_\_\_\_\_





**Audit Inspection Report**  
**Module 3 – Analyzer Gas Audit**

Facility Name Example Date 12/25/99 Time 10:15 am pm  
 Facility Address 123 Anywhere Street, Lowell Facility Number 002589  
 Test system Number AB123456 Serial Number 1234567890  
 Software Version Number MA1.07 Auditor Name MJ Reinner

Initial test				Retest after calibration of the analyzer				
P	F	Check	Standard (S)	Allowed error	High limit	Measured	Low Limit	
X		Leak check fails uncapped						
X		Leak check passes capped						
X		Zero air	HC ppm	1	9	10	2	-8
X			CO %	0.00	0.02	0.02	0.00	-0.02
X			CO2 %	0.1	0.3	0.4	0.1	-0.2
X			NO ppm	6	25	31	25	-19
X			O2	20.9	1.1	22.0	20.9	19.8
X		O2	O2	1.0	0.1	1.1	1.0	0.9
X		Low	HC ppm	200	8	208	192	192
X			CO %	0.50	0.02	0.52	0.50	0.48
X			CO2 %	6.0	0.3	6.3	6.1	5.7
X			NO ppm	300	28	328	280	272
X		Mid #1	HC ppm	910	39	949	908	871
X			CO %	2.40	0.10	2.50	2.40	2.30
X			CO2 %	3.6	0.3	3.9	3.6	3.3
	X		NO ppm	900	46	946	835	854
X		Mid #2	HC ppm	1920	78	1998	1952	1842
	X		CO %	4.80	0.20	5.00	4.50	4.60
	X		CO2 %	7.2	0.3	7.5	6.5	6.9
	X		NO ppm	1800	92	1892	1680	1708
X		High	HC ppm	3200	131	3331	3123	3069
X			CO %	8.00	0.33	8.33	8.02	7.67
X			CO2 %	12.0	0.5	12.5	12.2	11.5
X			NO ppm	3000	153	3153	2890	2847

Comments: Analyzer still fails significantly after recalibration, cause unknown.

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Auditor MJ Reinner 12-25-1999  
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 Signature Date

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**Audit Inspection Report**  
**Module 8 – OBDII Tester Audit**

Facility Name Example Date 12/25/99 Time 10:15 am pm  
 Facility Address 123 Anywhere Street, Lowell Facility Number 002589  
 Test system Number AB123456 Serial Number 1234567890  
 Software Version Number MA1.07 Auditor Name MJ Reinner

P	F	Checks									
		Power to On time:	15								
		On to Run time:	30								
		Protocol:	VPW								
		OBD Level:	OBD & OBDII								
		I/M Monitors	Set			Read					
			Complete	Not Complete	Unsupported	Complete	Not Complete	Unsupported			
X		Misfire	X			X					
X		Fuel System	X			X					
X		Component	X			X					
X		Catalyst	X			X					
X		Heated Catalyst		X			X				
X		EVAP System	X			X					
X		Secondary Air	X			X					
	X	A/C Sys Refrig			X		X				
X		Oxygen Sensor		X			X				
X		O2 Sensor Heater			X			X			
X		EGR System	X			X					
		MIL	ON		OFF		ON		OFF		
X		Commanded	X				X				
		DTC's	Set			Read					
X		1	P0301			P0301					
X		2	P0606			P0606					
X		3	P0781			P0781					
		4									
		5									
		6									

Comments: \_\_\_\_\_  
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Auditor MJ Reinner Date 12-25-1999  
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 Signature Date

**Audit Inspection Report**  
**Module 9 – Flow and Dilution VMAS Audit**

Facility Name Example Date 12/25/99 Time 10:15 (am)pm  
 Facility Address 123 Anywhere Street, Lowell Facility Number 002589  
 Test system Number AB123456 Serial Number 1234567890  
 Software Version Number MA1.07 Auditor Name MJ Reinner

P	F	Hose Off Flow Check		
		Factory Flow Rate (SCFM)	Measured Flow Rate (SCFM)	% Difference
X		423	403	4.7

P	F	Dilute O2 Sensor Check							
		Check	Cylinder Conc. (%)	Conc. at 60 sec	Conc. at 65 sec	Conc. at 70 sec	High Limit (Cyl + 0.3)	Avg. Analyzer Conc. (%)	Low Limit (Cyl - 0.3)
X		15% O2	15.13	15.20	15.10	15.03	15.43	15.11	14.83
	X	8% O2	7.98	8.30	8.35	8.43	8.28	8.36	7.68

P	F	SAO Annual Flow Audit							
		Barometric pressure (in Hg):			30.03				
		Ambient temperature (degrees C):			22.1				
		SAO calibration constant (SAO <sub>c</sub> ):			2513				
		Trial #	Manometer Pressure (inches of water)		VMAS Flow (SCFM)		SAO Flow (SCFM)		% Difference
X		1- Max flow	10.02		360.4		357.8		0.7
X		2 - Approx 225 SCFM	6.39		227.3		228.2		0.4
	X	3- Mid point	8.24		263.1		294.2		10.6

Comments: \_\_\_\_\_  
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Auditor

MJ Reinner

12-25-1999

Signature

Date