

**SOURCE TEST REPORT
FOR**

**OXIDES OF NITROGEN, CARBON MONOXIDE,
CARBON DIOXIDE
AND OXYGEN EMISSIONS FROM
DIESEL GENERATOR NUMBER 3
FDEP PERMIT NO 0950111-022-AC**

PREPARED FOR

**Disney Worldwide Services, Inc
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5601 Center Drive
Lake Buena Vista, Florida 32830-1000**

PREPARED BY

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GROVE
SCIENTIFIC & ENGINEERING

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6/22/04

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Report Certification

To the best of my knowledge, all data presented in this report are true and correct and comply with the requirements of the Florida Department of Environmental Protection.



Bruno A. Ferraro, CEP, QEP
President

6/22/04
Date



SECTION 1.0

INTRODUCTION

1.3 Background

Grove Scientific & Engineering Company was contracted by Disney Worldwide Services, Inc. to test a standby diesel generator under various loads and report the emissions of oxides of nitrogen (NO_x). The test was being conducted in support of an air pollution construction permit application under review at FDEP Tallahassee and to compare the measured emissions with the manufacture's reported emission factors.

1.4 Procedure

Standby generator number 3 was selected for testing. All three diesel engines and generators are the same make and model; Detroit Diesel Model 1750DS-4, 16V4000 4-cycle. The unit tested has the following engine serial number; S272001717. Each engine is rated at 1.75 MW.

A stack extension with test ports was fabricated and installed on the exhaust pipe of the engine. This stack extension meets the requirements of USEPA Method 1. The stack was safely accessed using a hydraulic lift. The following test conditions were established:

Day 1

- one (1) short run during startup until the engine reaches steady state conditions under idle,
- three (3) 1-hour runs at 60% load using a load-bank,
- one (1) short run during engine shut-down at minimal power rating (10% load).

Day 2

- one (1) startup at 90% load
- three (3) runs at 75% load
- three (3) runs at 90% load
- one (1) short run during engine shut-down at minimal power rating (10% load).

A load bank was used to place a measurable demand on the engines. Field data sheets were maintained by Disney personnel and are included in the Appendix D of the stack test report. These data include fuel consumption, percent load, megawatts, RPM and other useful data that can be referenced in the future if needed.

The source was tested by Air Consulting & Engineering, Inc. using EPA Methods 1-4 for flow rate determination; Method 3A for oxygen (O₂) and carbon dioxide (CO₂); Method 9 for visible emissions; and Method 7E for NO_x emissions. A fuel sample was collected and analyzed and the results included in Appendix F of the stack test report.

SECTION 2.0 RESULTS

2.1 Summary of Startup and Shut Down Tests

The startup and shut down test results are presented in Table 2-1 below.

Table 2-1: Summary of Startup and Shut Down Tests

Parameter	Startup 1	Shut Down 1	Startup 2	Shut Down 2
Percent Load	10	10	90	10
NOx lbs/gal	0.190	0.213	0.264	0.218
NOx lbs/MMBTU	1.384	1.553	1.922	1.584
CO lbs/gal	0.104	0.375	0.027	0.391
CO lbs/MMBTU	0.759	2.729	0.194	2.844

2.2 Summary of Load Tests

The 3-run summary of each load test is presented in Table 2-2. Individual test runs are included in the attached stack test report.

Parameter	60% Load	75% Load	90% Load
NOx lbs/gal	0.284	0.346	0.349
NOx lbs/MMBTU	2.069	2.521	2.536
CO lbs/gal	0.028	0.026	0.026
CO lbs/MMBTU	0.199	0.176	0.174

APPENDIX A
AIR CONSULTING & ENGINEERING, INC.
SOURCE TEST REPORT

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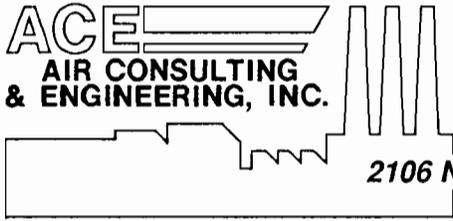
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ACE
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REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Stephen L. Neck
Stephen L. Neck, P.E.

6/21/04
Date

1.0 INTRODUCTION

Air Consulting & Engineering, Inc. (ACE) performed testing to determine Nitrogen Oxides (NOx) emissions from Disney Worldwide Services, Inc. Diesel Generator Number 3 on May 18 through 20, 2004. NOx emissions were determined at three load levels (60%, 75%, and 90%) and at startup and shutdown conditions on two occasions.

United States Environmental Protection Agency's (EPA) Methods 1-4 were utilized for flow rate determination; Method 3A for Oxygen (O2) and Carbon Dioxide (CO2); and Method 7E for NOx emissions.

Mr. Rich Bumar, P.E. and Mr. Jim McAlister of Disney Worldwide Services, Inc. and Mr. Bruno Ferraro of Grove Scientific & Engineering Company coordinated testing.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the three load tests are summarized in Table 1. NOx emissions averaged 0.284, 0.346, and 0.349 lbs/gal for the 60%, 75%, and 90% loads respectively. Results of two start-up and shutdown sequences are contained in Table 2. During the first startup the engine was brought up to operating temperature under idle conditions. During the second startup the engine was immediately brought to 90% load. During both shutdowns the engine was at a minimal power setting while the load banks where the electrical power was dissipated were allowed to cool. Complete emission results are contained in Appendix A; flow rate determination results are contained in Appendix B; 30 second data logger averages are presented in Appendix C; field data sheets are contained in Appendix D; and quality assurance data is located in Appendix E.

A fuel sample was analyzed for heating value, and sulfur, ash, and moisture content; the results of this analysis and the chain of custody for the sample are contained in Appendix F.

Project participants are listed in Appendix G.

TABLE 1: Oxides of Nitrogen Emission Summary
 Disney Worldwide Services, Inc.
 Lake Buena Vista, Florida
 Diesel Number 3
 May 18 and 20, 2004

NOx	RUNS 1-3				RUNS 1-3				RUNS 1-3			
	60 % LOAD			60%	75 % LOAD			75%	90 % LOAD			90%
RUNS:	1	2	3	AVG.	1	2	3	AVG.	1	2	3	AVG.
LB/HR:	20.64	20.85	22.09	21.19	32.99	33.46	33.24	33.23	37.98	38.65	37.99	38.21
LB/GAL:	0.284	0.275	0.294	0.284	0.348	0.348	0.343	0.346	0.347	0.348	0.351	0.349
LB/MMBTU (FUEL ANALYSIS):	2.069	1.999	2.138	2.069	2.532	2.531	2.499	2.521	2.522	2.534	2.553	2.536
LB/MMBTU (FUEL FACTOR):	1.893	2.013	2.076	1.994	2.328	2.310	2.296	2.311	2.260	2.336	2.329	2.308

TABLE 2: Start-up and Shut-down Emission Summary
 Disney Worldwide Services, Inc.
 Lake Buena Vista, Florida
 Diesel Number 3
 May 18, 19, and 20, 2004

EVENT:	START	STOP	START	STOP
DATE:	5/18/04	5/18/04	5/19/04	5/20/04
BEGIN TIME:	8:15	17:53	8:00	16:31
END TIME:	8:29	18:03	8:15	16:39
LB/MMBTU (FUEL FACTOR):	1.384	1.553	1.922	1.584
LB/HR (FUEL FACTOR):	3.424	3.969	31.168	6.270
LB/GAL (FUEL FACTOR):	0.190	0.213	0.264	0.218
LB/EVENT**(FUEL FACTOR):	36.408	139.934	35.207	146.626

** lbs/start-up or lbs/shut-down

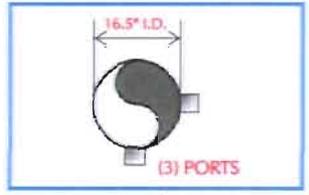
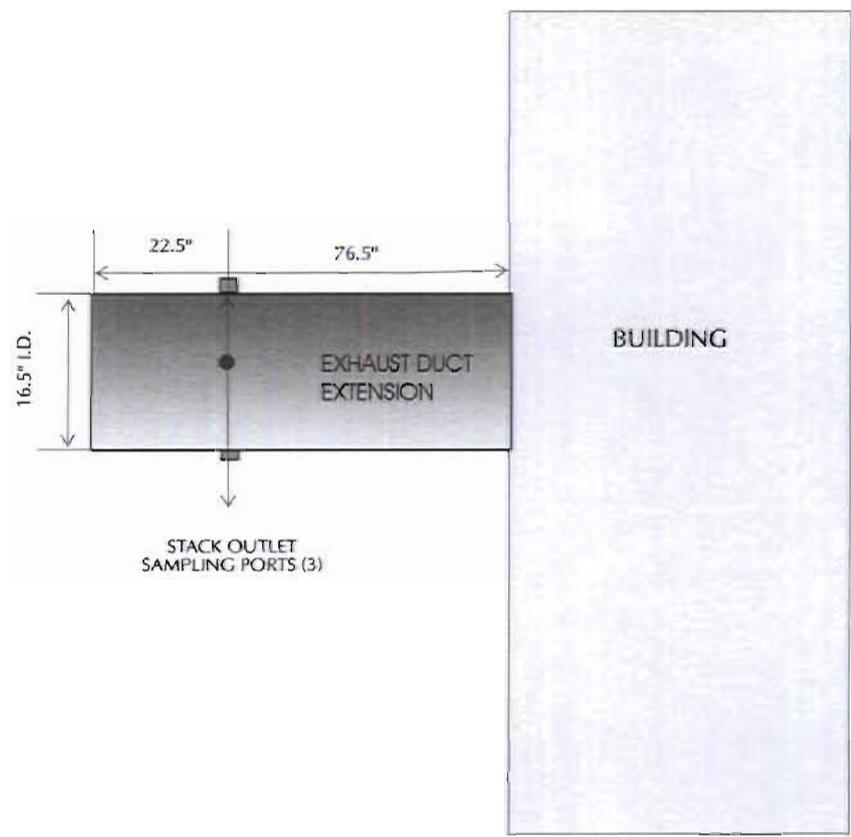
3.0 PROCESS DESCRIPTION AND OPERATION

Diesel Number 3 at Disney Worldwide Services is a Detroit Diesel Model 1750DS-4; it is a 16V4000 4-cycle. The engine serial number is S272001717. This engine is one of three identical engines used to produce back up electricity in event of a power outage. Full rated output for the generator is 1.75 MW.

4.0 SAMPLING POINT LOCATION

Figure 1 is a schematic of the temporary exhaust duct extension, which was put in place to meet the minimum criteria specified in EPA Method 1 for flow measurement. Included in this figure are the traverse points (measured from the inside wall of the duct) used for velocity determination.

Three ports were placed in the duct extension. The top port was used for the gas and moisture probes while the bottom and side ports were used for the velocity traverse.



TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
1	0.53
2	1.73
3	3.20
4	5.33
5	11.17
6	13.30
7	14.77
8	15.97

SOURCE: AIR CONSULTING & ENGINEERING, INC. (299EPCOTD12) 12/22/00

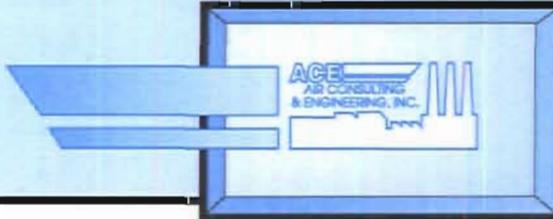


FIGURE 1.
SAMPLING POINT LOCATION
DIESEL GENERATOR 3
DISNEY WORLDWIDE SERVICES, INC.
LAKE BUENA VISTA, FLORIDA

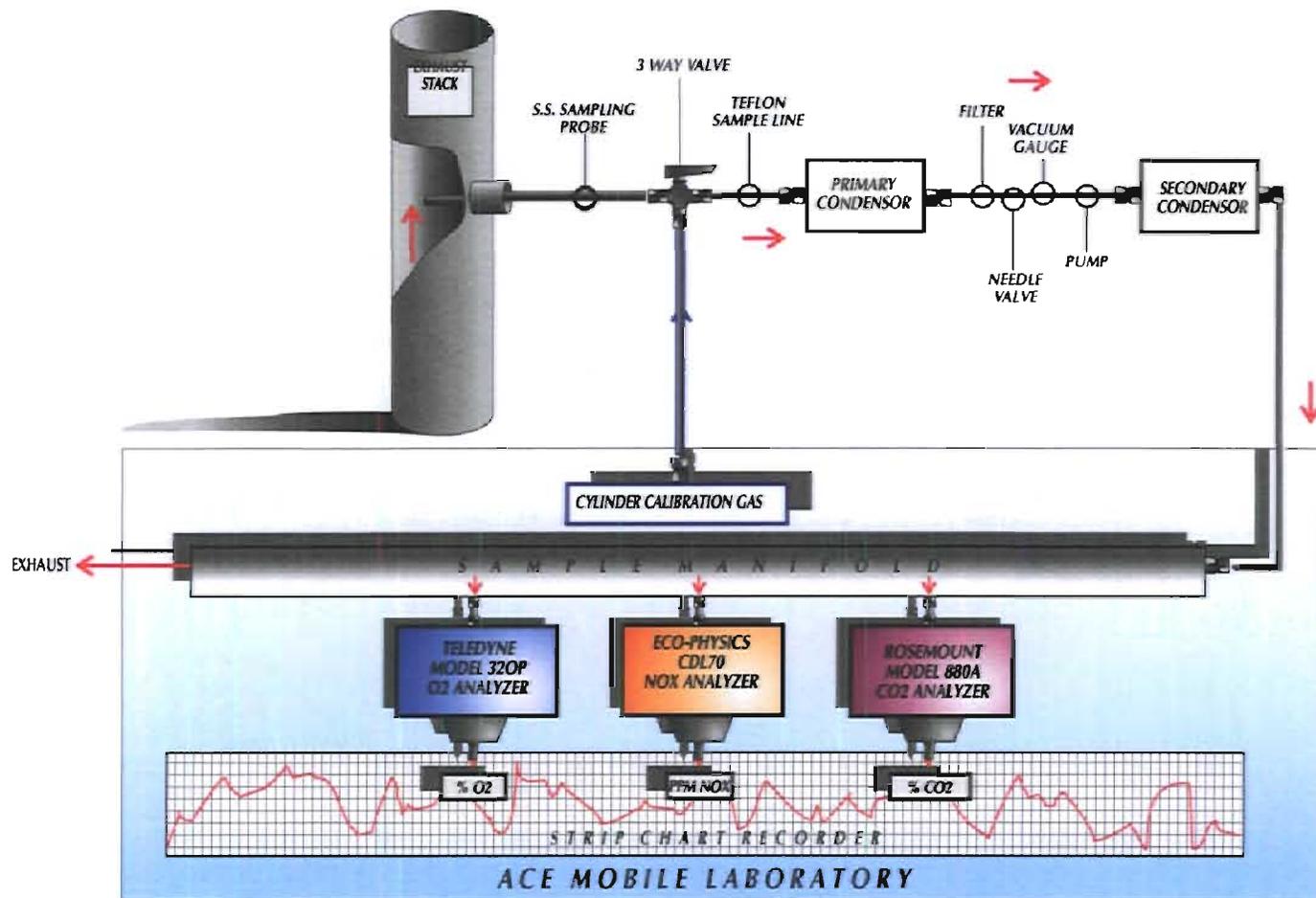
5.0 FIELD AND ANALYTICAL PROCEDURES

5.1 Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure)--EPA Method 7E / EPA Method 3A (Oxygen as Diluent Gas)

Figure 2 is a schematic of the gas analysis system used to perform EPA Methods 3A and 7E. The analysis system consists of the following major parts:

- A stainless steel probe that is placed in the exhaust duct.
- A stainless steel three-way valve that is used to select between sampling and system bias check.
- Sample line to transport the sample from the three-way valve to the primary moisture condenser.
- A primary moisture condenser in an ice water bath to remove water of combustion.
- A filter to remove particulate matter from the gas stream.
- A needle valve to regulate gas flow.
- A vacuum gauge used in conjunction with the needle valve to maintain a constant amount of vacuum and hence a constant sample rate.
- A vacuum pump capable of maintaining a flow rate of approximately 10 liters per minute.
- A secondary condenser in an ice water bath to remove any moisture that condenses as a result of the sample going from vacuum to pressure across the pump.
- A sample manifold that distributes the sample to the various analyzers and dumps the excess to the atmosphere, maintaining the pressure in the manifold and hence at the analyzer inlets constant.
- Analyzers: an Eco-Physics CLD 70S NO_x analyzer on a 1500 ppm range; a Teledyne 320P O₂ analyzer on a 25% range; and a Rosemount 880A CO₂ analyzer on a 20% range. Each of these analyzers has an analog voltage output.
- A Pico Technology Limited ADC-16 High Resolution Data Logger to convert the analog output of the analyzers into a digital signal.
- A Hewlett-Packard Pavilion ZE4125 lap-top computer to run the Pico Technology software and record the analyzer output.

At the beginning of each day calibration gasses were introduced at the sample manifold to show instrument linearity as per EPA methods 3A and 7E. Calibration gasses were then introduced at the three-way valve to determine the sampling system bias. Three one hour runs at each load level were then performed; between each run a system bias check was conducted and the results of the run corrected to account for the initial and final system bias.



SOURCE: AIR CONSULTING & ENGINEERING, INC. (CALUCEM) 3/19/01



FIGURE 2.

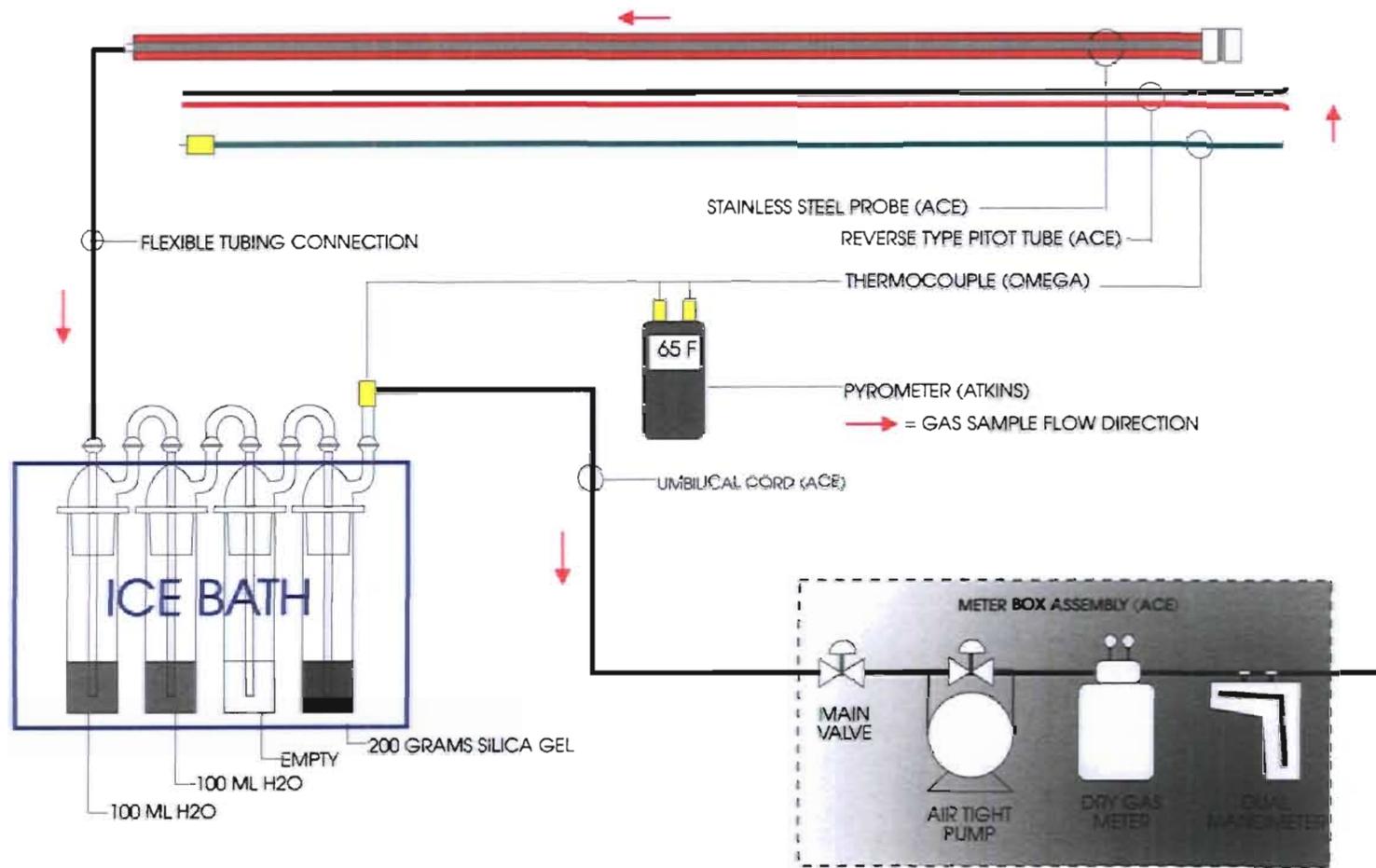
EPA METHODS 3A AND 7E SAMPLING SCHEMATIC
(DETERMINATION OF OXYGEN AND
NITROGEN OXIDE EMISSIONS FROM STATIONARY SOURCES)

5.2 Flow Rate Determination--EPA Methods 1-4

Figure 3 is a diagram of the velocity and moisture determination system used to perform EPA Methods 2 and 4. This system consists of the following major components:

- S-type pitot tubes with a K-type thermocouple for determining velocity head and stack temperature at traverse points determined by EPA Method 1.
- A stainless steel moisture probe with a flexible line attaching the probe to the first impinger.
- Four Greenburg-Smith impingers in an ice water bath to collect the moisture sample. The four impingers are connected in series with the first two charged with 100 ml of water each, the third dry, and the fourth charged with 200 grams of silica gel.
- A meter box assembly that houses flow adjustment valves, a calibrated dry gas meter, a dual inclined liquid manometer, and other sub-components.
- A pyrometer to monitor the stack temperature and the temperature at the exit of the fourth impinger.
- Umbilical chord with multiple leak free flexible tubes and thermocouple lines to connect the pitot tubes, thermocouple, and impingers to the meter box assembly and pyrometer.
- A leak-free vacuum pump capable of maintaining a minimum of one Standard Cubic Foot per Minute (SCFM) sample rate. Note: this pump is external to the meter box assembly for weight considerations, figure 3 shows it mounted internally to simplify the sample flow schematic.

One moisture run was performed for each of the three load levels. For each run the moisture system was leak checked from the tip of the probe prior to and after the moisture run to confirm a leak rate of less than 0.02 SCFM. After the initial leak check the probe was placed in the duct, the initial volume of the gas meter recorded, the pump started, and the sample rate adjusted to and maintained at 0.75 SCFM. The sample was drawn from the exhaust duct through the probe, through the impingers to condense the moisture, through the umbilical chord to the meter box assembly. During the run the exit of the impingers was maintained at or below 68 F and the pressure and temperature of the gas meter were recorded. At the end of the run the final meter volume was recorded and a leak check performed. After the final leak check the moisture in the impingers and the weight of the silica gel was measured and the gain recorded. The dry gas meter pressure and temperature data were used to convert the metered volume from actual to standard conditions and a stack gas moisture concentration was calculated based on the condensed moisture and the standard volume of gas sampled. All procedures and calculations were performed as per EPA Method 4.



SOURCE: AIR CONSULTING & ENGINEERING, INC. 5-COLOR 7/21/98



FIGURE 3.

EPA METHOD 1-4 SAMPLING SCHEMATIC
(DETERMINATION OF FLOW RATE
FROM STATIONARY SOURCES)

One velocity traverse was performed per one-hour gas run. The pitot tube/thermocouple assembly was attached via the umbilical chord to the inclined manometer in the meter box assembly and the pyrometer. A leak check was performed prior to the first traverse and after each traverse. None of the velocity equipment was disassembled until after the final traverse. A total of 16 points were used to take velocity head and temperature measurements during each traverse as per EPA Method 1. All procedures and volumetric flow rate calculations were performed as per EPA Method 2.

APPENDIX A

COMPLETE EMISSION RESULTS

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

DISNEY WORLDWIDE SERVICES, INC.
 LAKE BUENA VISTA, FL
 DIESEL NO. 3

	1	2	3	4	5	6	7	8	9			
RUN NUMBER:	1	2	3	4	5	6	7	8	9			
DATE:	5/18/04	5/18/04	5/18/04	5/18/04	5/18/04	5/18/04	5/20/04	5/20/04	5/20/04			
BEGIN TIME:	8:37	10:03	12:28	13:50	15:17	16:37	12:43	14:10	15:30			
END TIME:	9:37	11:32	13:40	14:50	16:17	17:37	12:48	15:10	16:30			
OXYGEN %:	12.76	12.64	12.55	11.72	11.67	11.66	11.45	11.45	11.38			
VOLUMETRIC FLOW (SCFMD):	4290	4013	4079	4944	5025	5017	5692	5605	5483			
TOTAL HEAT INPUT (MMBTU) by "F" FACTOR:	10.9	10.4	10.6	14.17	14.48	14.48	16.80	16.55	16.31			
"F" FACTOR:	9190	9190	9190	9190	9190	9190	9190	9190	9190			
OXIDES of NITROGEN (NOx) PPM:	671.7	725.3	756.0	931.5	929.5	924.8	931.2	962.6	967.1			
CARBON MONOXIDE PPM (CO):	117.2	118.1	117.2	112.9	118.0	118.0	114.6	118.6	121.0			
GALLONS FUEL BURNED PER HOUR:	72.6	75.9	75.2	94.8	96.2	96.8	109.6	111.0	108.3			
NOx:		60 % LOAD	60% AVG		75 % LOAD	75% AVG	90 100 % LOAD		90 100 % AVG			
LB/HR:	20.64	20.85	22.09	21.19	32.99	33.46	33.24	33.23	37.98	38.65	37.99	38.21
LB/GAL:	0.284	0.275	0.294	0.284	0.348	0.348	0.343	0.346	0.347	0.348	0.351	0.349
LB/MMBTU (FUEL ANALYSIS):	2.069	1.999	2.138	2.068	2.532	2.531	2.499	2.521	2.522	2.534	2.553	2.536
LB/MMBTU (FUEL FACTOR):	1.893	2.013	2.076	1.994	2.328	2.310	2.296	2.311	2.260	2.336	2.329	2.308
CO:												
LB/HR:	2.19	2.07	2.08	2.11	2.43	2.59	2.58	2.53	2.84	2.90	2.89	2.88
LB/GAL:	0.030	0.027	0.028	0.028	0.026	0.027	0.027	0.026	0.026	0.026	0.027	0.026
LB/MMBTU (FUEL ANALYSIS):	0.220	0.198	0.202	0.206	0.187	0.196	0.194	0.192	0.189	0.190	0.194	0.191
LB/MMBTU (FUEL FACTOR):	0.201	0.199	0.196	0.199	0.172	0.178	0.178	0.176	0.169	0.175	0.177	0.174

AIR CONSULTING and ENGINEERING, INC.

COMPLETE EMISSION DATA

DISNEY WORLDWIDE SERVICES, INC.
LAKE BUENA VISTA, FL
DIESEL NO. 3

RUN NUMBER:	START	STOP	START	STOP
DATE:	5/18/04	5/18/04	5/19/04	5/20/04
BEGIN TIME:	8:15	17:53	8:00	16:31
END TIME:	8:29	18:03	8:15	16:39
OXYGEN %:	17.38	17.55	11.30	17.60
"F" FACTOR:	9190	9190	9190	9190
OXIDES of NITROGEN (NOx) PPM:	212.30	227.06	804.91	228.28
CARBON MONOXIDE PPM (CO):	191.39	655.79	133.29	673.54
GALLONS FUEL BURNED PER HOUR:	18.0	18.6	118.0	28.8
NOx:				
LB/MMBTU (FUEL FACTOR):	1.384	1.553	1.922	1.584
LB/HR (FUEL FACTOR):	3.424	3.969	31.168	6.270
LB/GAL (FUEL FACTOR):	0.190	0.213	0.264	0.218
LB/EVENT**(FUEL FACTOR):	36.408	139.934	35.207	146.626
CO:				
LB/MMBTU (FUEL FACTOR):	0.759	2.729	0.194	2.844
LB/HR (FUEL FACTOR):	1.879	6.976	3.141	11.257
LB/GAL (FUEL FACTOR):	0.104	0.375	0.027	0.391
LB/EVENT**(FUEL FACTOR):	1.879	6.976	3.141	11.257

** LB/START UP OR LB/SHUT DOWN

AIR CONSULTING & ENGINEERING, INC.
BIAS CORRECTION

DISNEY WORLD WIDE SERVICES
DIESEL NO. 3

Fd: 9190
Fc: 1420

RUN	GAS	VALUE	INITIAL		FINAL		RUN	AVG	CORRECTED	LB/MMBTU		Fc	
			BIAS	ZERO	BIAS	ZERO				ZERO	DRY		O2 BASED
START	NOx	854.00	861.76	0.00	841.63	3.73	213.13	851.70	1.87	212.30	1.38	1.40	1.37
START	CO	58.60	58.91	0.32	57.69	-0.51	190.62	58.30	-0.10	191.39			
START	O2	13.92	14.16	-0.03	13.93	-0.03	17.55	14.05	-0.03	17.38			
START	CO2	4.987	4.91	0.08	4.74	0.08	2.52	4.83	0.08	2.56			
1	NOx	854.00	861.76	0.00	841.63	3.73	670.24	851.70	1.87	671.65	1.89	1.88	1.34
1	CO	58.60	58.91	0.32	57.69	-0.51	116.71	58.30	-0.10	117.21			
1	O2	13.92	14.16	-0.03	13.93	-0.03	12.88	14.05	-0.03	12.76			
1	CO2	4.987	4.91	0.08	4.74	0.08	5.86	4.83	0.08	6.07			
2	NOx	854.00	841.63	3.73	798.76	7.82	697.46	820.20	5.78	725.30	2.01	2.01	1.35
2	CO	58.60	57.69	-0.51	50.99	-5.96	112.76	54.34	-3.24	118.06			
2	O2	13.92	13.93	-0.03	13.51	0.03	12.46	13.72	0.00	12.64			
2	CO2	4.987	4.74	0.08	4.82	0.07	5.84	4.78	0.08	6.11			
3	NOx	854.00	855.09	0.00	855.26	4.88	757.27	855.18	2.44	755.95	2.08	2.06	1.34
3	CO	58.60	57.80	-0.21	58.55	-0.15	116.52	58.18	-0.18	117.19			
3	O2	13.92	14.04	-0.01	14.21	-0.01	12.73	14.13	-0.01	12.55			
3	CO2	4.987	4.95	0.07	4.67	0.07	6.00	4.81	0.07	6.23			
4	NOx	854.00	855.26	4.88	845.17	5.76	926.88	850.22	5.32	931.49	2.33	2.29	1.33
4	CO	58.60	58.55	-0.15	58.12	-0.15	112.55	58.34	-0.15	112.92			
4	O2	13.92	14.21	-0.01	14.13	0.03	11.94	14.17	0.01	11.72			
4	CO2	4.987	4.67	0.07	4.59	0.07	6.38	4.63	0.07	6.90			
5	NOx	854.00	845.17	5.76	842.47	6.06	917.94	843.82	5.91	929.54	2.31	2.27	1.33
5	CO	58.60	58.12	-0.15	57.95	0.98	116.44	58.04	0.42	118.00			
5	O2	13.92	14.13	0.03	14.13	0.01	11.85	14.13	0.02	11.67			
5	CO2	4.987	4.59	0.07	4.59	0.07	6.37	4.59	0.07	6.95			
6	NOx	854.00	842.47	6.06	839.14	7.82	909.94	840.81	6.94	924.80	2.30	2.25	1.33
6	CO	58.60	57.95	0.98	57.59	0.10	115.80	57.77	0.54	118.02			
6	O2	13.92	14.13	0.01	14.08	-0.01	11.82	14.11	0.00	11.66			
6	CO2	4.987	4.59	0.07	4.60	0.07	6.38	4.60	0.07	6.96			
STOP	NOx	854.00	839.14	7.82	839.14	7.82	228.85	839.14	7.82	227.06	1.55	1.64	1.43
STOP	CO	58.60	57.59	0.10	57.59	0.10	643.47	57.59	0.10	655.79			
STOP	O2	13.92	14.08	-0.01	14.08	-0.01	17.75	14.08	-0.01	17.55			
STOP	CO2	4.987	4.60	0.07	4.60	0.07	2.20	4.60	0.07	2.35			
START	NOx	854.00	853.85	0.00	853.85	0.00	804.76	853.85	0.00	804.91	1.92	1.94	1.36
START	CO	58.60	56.68	-1.71	56.68	-1.71	131.11	56.68	-1.71	133.29			
START	O2	13.92	14.11	0.01	14.11	0.01	11.45	14.11	0.01	11.30			
START	CO2	4.987	4.79	0.07	4.79	0.07	6.74	4.79	0.07	7.04			
7	NOx	854.00	855.68	0.00	833.87	1.84	921.11	844.78	0.92	931.25	2.26	2.28	1.36
7	CO	58.60	58.34	0.51	54.11	-3.43	111.36	56.23	-1.46	114.61			
7	O2	13.92	14.03	-0.02	13.63	-0.03	11.37	13.83	-0.03	11.45			
7	CO2	4.987	5.02	0.07	4.60	0.06	6.65	4.81	0.07	6.92			
8	NOx	854.00	833.87	1.84	819.18	7.76	930.97	826.53	4.80	962.55	2.34	2.29	1.32
8	CO	58.60	54.11	-3.43	52.48	-6.21	112.82	53.30	-4.82	118.62			
8	O2	13.92	13.63	-0.03	13.55	-0.01	11.17	13.59	-0.02	11.45			
8	CO2	4.987	4.60	0.06	4.64	0.07	6.58	4.62	0.07	7.14			
9	NOx	854.00	819.18	7.76	811.00	5.78	922.18	815.09	6.77	967.14	2.33	2.28	1.32
9	CO	58.60	52.48	-6.21	50.25	-7.34	113.32	51.37	-6.78	121.04			
9	O2	13.92	13.55	-0.01	13.53	0.00	11.07	13.54	-0.01	11.38			
9	CO2	4.987	4.64	0.07	4.66	0.07	6.69	4.65	0.07	7.21			
STOP	NOx	854.00	811.00	5.78	811.00	5.78	221.02	811.00	5.78	228.28	1.58	1.70	1.45
STOP	CO	58.60	50.25	-7.34	50.25	-7.34	654.59	50.25	-7.34	673.54			
STOP	O2	13.92	13.53	0.00	13.53	0.00	17.10	13.53	0.00	17.60			
STOP	CO2	4.987	4.66	0.07	4.66	0.07	2.17	4.66	0.07	2.28			

APPENDIX B

FLOW RATE DETERMINATION

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	1	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	8:37 AM	SILICA GEL. gms.	9.2
END TIME (hour : minute):	9:37 AM	% O2:	12.76
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.07
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.13 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	223.710 CUBIC FT.		
INITIAL METER:	188.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		
PITOT Cp:	0.84		

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	9646
AVG. SQ. RT. VEL. HEAD:	1.3309	VOLUMETRIC FLOW(WVSCFM):	342
AVG. VEL. HEAD (in H2O):	1.7875	VOLUMETRIC FLOW(DSCFM):	4290
AVG. STACK TEMP. (F):	646.9	VOLUMETRIC FLOW(WSCFM):	4631
AVG. METER TEMP. (F):	73.1		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	35.01		
METER SCF:	34.966		
MEASURED SCF MOISTURE:	2.787		
MEASURED MOISTURE %:	7.38		
STACK TEMP. (deg. C):	341.6		
VAPOR PRESSURE:	3776.1		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	7.38		
GAS MOLECULAR WT.(dry):	29.48		
GAS MOLECULAR WT.(wet):	28.63		
PERCENT EXCESS AIR:	147.332		
AVERAGE VELOCITY(FPS):	108.3		
MMBTUH(if applicable):	10.90		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	2	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	10:03 AM	SILICA GEL. gms.	9.2
END TIME (hour : minute):	11:32 AM	% O2:	12.64
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.11
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.13 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	223.710 CUBIC FT.		
INITIAL METER:	188.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	9318
AVG. SQ. RT. VEL. HEAD:	1.2652	VOLUMETRIC FLOW(WVSCFM):	320
AVG. VEL. HEAD (in H2O):	1.6250	VOLUMETRIC FLOW(DSCFM):	4013
AVG. STACK TEMP. (F):	683.0	VOLUMETRIC FLOW(WSCFM):	4332
AVG. METER TEMP. (F):	73.1		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	35.01		
METER SCF:	34.966		
MEASURED SCF MOISTURE:	2.787		
MEASURED MOISTURE %:	7.38		
STACK TEMP. (deg. C):	361.7		
VAPOR PRESSURE:	4647.6		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	7.38		
GAS MOLECULAR WT.(dry):	29.48		
GAS MOLECULAR WT.(wet):	28.64		
PERCENT EXCESS AIR:	143.409		
AVERAGE VELOCITY(FPS):	104.6		
MMBTUH(if applicable):	10.36		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	3	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	12:28 PM	SILICA GEL. gms.	9.2
END TIME (hour : minute):	1:40 PM	% O2:	12.55
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.23
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.13 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	223.710 CUBIC FT.		
INITIAL METER:	188.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	9583
AVG. SQ. RT. VEL. HEAD:	1.2939	VOLUMETRIC FLOW(WVSCFM):	325
AVG. VEL. HEAD (in H2O):	1.6875	VOLUMETRIC FLOW(DSCFM):	4079
AVG. STACK TEMP. (F):	696.5	VOLUMETRIC FLOW(WSCFM):	4404
AVG. METER TEMP. (F):	73.1		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	35.01		
METER SCF:	34.966		
MEASURED SCF MOISTURE:	2.787		
MEASURED MOISTURE %:	7.38		
STACK TEMP. (deg. C):	369.2		
VAPOR PRESSURE:	5001.1		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	7.38		
GAS MOLECULAR WT.(dry):	29.50		
GAS MOLECULAR WT.(wet):	28.65		
PERCENT EXCESS AIR:	141.135		
AVERAGE VELOCITY(FPS):	107.6		
MMBTUH(if applicable):	10.64		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	4	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	1:50 PM	SILICA GEL. gms.	13.6
END TIME (hour : minute):	2:50 PM	% O2:	11.72
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.90
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.09 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	268.039 CUBIC FT.		
INITIAL METER:	224.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	11982
AVG. SQ. RT. VEL. HEAD:	1.5908	VOLUMETRIC FLOW(WVSCFM):	352
AVG. VEL. HEAD (in H2O):	2.5469	VOLUMETRIC FLOW(DSCFM):	4944
AVG. STACK TEMP. (F):	741.0	VOLUMETRIC FLOW(WSCFM):	5295
AVG. METER TEMP. (F):	88.5		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	43.339		
METER SCF:	42.069		
MEASURED SCF MOISTURE:	2.994		
MEASURED MOISTURE %:	6.64		
STACK TEMP. (deg. C):	393.9		
VAPOR PRESSURE:	6271.5		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.64		
GAS MOLECULAR WT.(dry):	29.57		
GAS MOLECULAR WT.(wet):	28.80		
PERCENT EXCESS AIR:	120.108		
AVERAGE VELOCITY(FPS):	134.5		
MMBTUH(if applicable):	14.17		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	5	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	3:17 PM	SILICA GEL. gms.	13.6
END TIME (hour : minute):	4:17 PM	% O2:	11.67
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.95
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.09 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	268.039 CUBIC FT.		
INITIAL METER:	224.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	12245
AVG. SQ. RT. VEL. HEAD:	1.6216	VOLUMETRIC FLOW(WVSCFM):	358
AVG. VEL. HEAD (in H2O):	2.6438	VOLUMETRIC FLOW(DSCFM):	5025
AVG. STACK TEMP. (F):	747.4	VOLUMETRIC FLOW(WSCFM):	5383
AVG. METER TEMP. (F):	88.5		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	43.339		
METER SCF:	42.069		
MEASURED SCF MOISTURE:	2.994		
MEASURED MOISTURE %:	6.64		
STACK TEMP. (deg. C):	397.4		
VAPOR PRESSURE:	6466.5		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.64		
GAS MOLECULAR WT.(dry):	29.58		
GAS MOLECULAR WT.(wet):	28.81		
PERCENT EXCESS AIR:	119.004		
AVERAGE VELOCITY(FPS):	137.4		
MMBTUH(if applicable):	14.48		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/18/04

RUN NUMBER:	6	IMPINGER ml.	50.0
BEGIN TIME (hour : minute):	4:37 PM	SILICA GEL. gms.	13.6
END TIME (hour : minute):	5:37 PM	% O2:	11.66
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.96
BAROMETRIC PRESSURE:	30.20 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	30.09 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	268.039 CUBIC FT.		
INITIAL METER:	224.700 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	12215
AVG. SQ. RT. VEL. HEAD:	1.6183	VOLUMETRIC FLOW(WVSCFM):	357
AVG. VEL. HEAD (in H2O):	2.6375	VOLUMETRIC FLOW(DSCFM):	5017
AVG. STACK TEMP. (F):	746.4	VOLUMETRIC FLOW(WSCFM):	5374
AVG. METER TEMP. (F):	88.5		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	43.339		
METER SCF:	42.069		
MEASURED SCF MOISTURE:	2.994		
MEASURED MOISTURE %:	6.64		
STACK TEMP. (deg. C):	396.9		
VAPOR PRESSURE:	6437.6		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.64		
GAS MOLECULAR WT.(dry):	29.58		
GAS MOLECULAR WT.(wet):	28.81		
PERCENT EXCESS AIR:	118.730		
AVERAGE VELOCITY(FPS):	137.1		
MMBTUH(if applicable):	14.48		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/20/04

RUN NUMBER:	7	IMPINGER ml.	55.0
BEGIN TIME (hour : minute):	12:43 PM	SILICA GEL. gms.	12.2
END TIME (hour : minute):	12:48 PM	% O2:	11.45
TOTAL RUN TIME:	60 MINUTES	% CO2:	6.92
BAROMETRIC PRESSURE:	30.12 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	29.94 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	310.650 CUBIC FT.		
INITIAL METER:	268.200 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	14057
AVG. SQ. RT. VEL. HEAD:	1.8507	VOLUMETRIC FLOW(WVSCFM):	425
AVG. VEL. HEAD (in H2O):	3.4406	VOLUMETRIC FLOW(DSCFM):	5692
AVG. STACK TEMP. (F):	753.8	VOLUMETRIC FLOW(WSCFM):	6118
AVG. METER TEMP. (F):	72.4		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	42.45		
METER SCF:	42.339		
MEASURED SCF MOISTURE:	3.163		
MEASURED MOISTURE %:	6.95		
STACK TEMP. (deg. C):	401.0		
VAPOR PRESSURE:	6664.7		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.95		
GAS MOLECULAR WT.(dry):	29.57		
GAS MOLECULAR WT.(wet):	28.76		
PERCENT EXCESS AIR:	113.367		
AVERAGE VELOCITY(FPS):	157.8		
MMBTUH(if applicable):	16.80		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/20/04

RUN NUMBER:	8	IMPINGER ml.	55.0
BEGIN TIME (hour : minute):	2:10 PM	SILICA GEL. gms.	12.2
END TIME (hour : minute):	3:10 PM	% O2:	11.45
TOTAL RUN TIME:	60 MINUTES	% CO2:	7.14
BAROMETRIC PRESSURE:	30.12 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	29.94 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	310.650 CUBIC FT.		
INITIAL METER:	268.200 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	13930
AVG. SQ. RT. VEL. HEAD:	1.8291	VOLUMETRIC FLOW(WVSCFM):	419
AVG. VEL. HEAD (in H2O):	3.3594	VOLUMETRIC FLOW(DSCFM):	5605
AVG. STACK TEMP. (F):	761.5	VOLUMETRIC FLOW(WSCFM):	6024
AVG. METER TEMP. (F):	72.4		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	42.45		
METER SCF:	42.339		
MEASURED SCF MOISTURE:	3.163		
MEASURED MOISTURE %:	6.95		
STACK TEMP. (deg. C):	405.3		
VAPOR PRESSURE:	6909.9		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.95		
GAS MOLECULAR WT.(dry):	29.60		
GAS MOLECULAR WT.(wet):	28.79		
PERCENT EXCESS AIR:	113.975		
AVERAGE VELOCITY(FPS):	156.3		
MMBTUH(if applicable):	16.55		
PERCENT ISOKINETIC:	NA		

**AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA**

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
LOCATION: LAKE BUENA VISTA, FL
SOURCE: DIESEL NO. 3
DATE: 5/20/04

RUN NUMBER:	9	IMPINGER ml.	55.0
BEGIN TIME (hour : minute):	3:30 PM	SILICA GEL. gms.	12.2
END TIME (hour : minute):	4:30 PM	% O2:	11.38
TOTAL RUN TIME:	60 MINUTES	% CO2:	7.21
BAROMETRIC PRESSURE:	30.12 inches Hg.	"F" FACTOR:	9190
STACK PRESSURE:	29.94 inches Hg.		
NOZZLE DIAMETER:	NA INCHES		
METER CORR. FACTOR:	0.996		
FINAL METER:	310.650 CUBIC FT.		
INITIAL METER:	268.200 CUBIC FT.		
STACK AREA:	1.485 SQ. FT.		NA
PITOT Cp:	0.84		NA

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	NA	VOLUMETRIC FLOW(ACFM):	13600
AVG. SQ. RT. VEL. HEAD:	1.7877	VOLUMETRIC FLOW(WVSCFM):	410
AVG. VEL. HEAD (in H2O):	3.2156	VOLUMETRIC FLOW(DSCFM):	5483
AVG. STACK TEMP. (F):	759.1	VOLUMETRIC FLOW(WSCFM):	5893
AVG. METER TEMP. (F):	72.4		
AVG. ORIFICE DIFFERENTIAL:	1.500		
METER ACF:	42.45		
METER SCF:	42.339		
MEASURED SCF MOISTURE:	3.163		
MEASURED MOISTURE %:	6.95		
STACK TEMP. (deg. C):	403.9		
VAPOR PRESSURE:	6832.3		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	6.95		
GAS MOLECULAR WT.(dry):	29.61		
GAS MOLECULAR WT.(wet):	28.80		
PERCENT EXCESS AIR:	112.485		
AVERAGE VELOCITY(FPS):	152.6		
MMBTUH(if applicable):	16.31		
PERCENT ISOKINETIC:	NA		

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 1 FROM: 8:37 TO: 9:37

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	1.75	#VALUE!	1.50	637	68
1 - 2	14.77	2.10	#VALUE!		644	69
1 - 3	13.30	2.10	#VALUE!		647	70
1 - 4	11.17	2.10	#VALUE!		650	71
1 - 5	5.33	1.80	#VALUE!		652	73
1 - 6	3.20	1.55	#VALUE!		648	74
1 - 7	1.73	1.20	#VALUE!		647	75
1 - 8	0.53	1.20	#VALUE!		634	76
2 - 1		1.60	#VALUE!		640	77
2 - 2		2.00	#VALUE!		640	78
2 - 3		2.20	#VALUE!		646	
2 - 4		2.25	#VALUE!		651	
2 - 5		1.80	#VALUE!		657	
2 - 6		2.00	#VALUE!		660	
2 - 7		1.50	#VALUE!		657	
2 - 8		1.45	#VALUE!		640	

AVERAGES: 1.788 1.500 646.88 73.10

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 2 FROM: 10:03 TO: 11:32

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	2.10	#VALUE!	1.50	682	68
1 - 2	14.77	2.15	#VALUE!		685	69
1 - 3	13.30	2.10	#VALUE!		689	70
1 - 4	11.17	2.20	#VALUE!		693	71
1 - 5	5.33	1.85	#VALUE!		697	73
1 - 6	3.20	1.50	#VALUE!		694	74
1 - 7	1.73	1.25	#VALUE!		685	75
1 - 8	0.53	1.00	#VALUE!		674	76
2 - 1		1.55	#VALUE!		670	77
2 - 2		1.60	#VALUE!		673	78
2 - 3		1.70	#VALUE!		679	
2 - 4		1.90	#VALUE!		684	
2 - 5		1.60	#VALUE!		689	
2 - 6		1.30	#VALUE!		692	
2 - 7		1.00	#VALUE!		671	
2 - 8		1.20	#VALUE!		671	

AVERAGES: 1.625 1.500 683.00 73.10

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 3 FROM: 12:28 TO: 13:40

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP_F	METER TEMP_F
1 - 1	15.97	2.00	#VALUE!	1.50	691	68
1 - 2	14.77	2.00	#VALUE!		694	69
1 - 3	13.30	2.05	#VALUE!		698	70
1 - 4	11.17	2.05	#VALUE!		702	71
1 - 5	5.33	1.75	#VALUE!		704	73
1 - 6	3.20	1.50	#VALUE!		700	74
1 - 7	1.73	1.45	#VALUE!		700	75
1 - 8	0.53	1.15	#VALUE!		695	76
2 - 1		1.20	#VALUE!		684	77
2 - 2		1.75	#VALUE!		685	78
2 - 3		1.90	#VALUE!		693	
2 - 4		1.90	#VALUE!		701	
2 - 5		1.90	#VALUE!		705	
2 - 6		1.50	#VALUE!		704	
2 - 7		1.45	#VALUE!		697	
2 - 8		1.45	#VALUE!		691	

AVERAGES: 1.688 1.500 696.50 73.10

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 4 FROM: 13:50 TO: 14:50
 75% LOAD

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	2.70	#VALUE!	1.50	740	84
1 - 2	14.77	2.80	#VALUE!		743	85
1 - 3	13.30	3.00	#VALUE!		746	85
1 - 4	11.17	3.20	#VALUE!		748	86
1 - 5	5.33	2.60	#VALUE!		750	87
1 - 6	3.20	2.20	#VALUE!		748	88
1 - 7	1.73	2.00	#VALUE!		744	89
1 - 8	0.53	1.80	#VALUE!		739	90
2 - 1		2.60	#VALUE!		743	91
2 - 2		2.75	#VALUE!		743	92
2 - 3		2.75	#VALUE!		748	92
2 - 4		2.90	#VALUE!		750	93
2 - 5		2.80	#VALUE!		749	
2 - 6		2.55	#VALUE!		723	
2 - 7		2.20	#VALUE!		722	
2 - 8		1.90	#VALUE!		720	

AVERAGES: 2.547 1.500 741.00 88.50

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 5 FROM: 15:17 TO: 16:17
 75% LOAD

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	2.70	#VALUE!	1.50	748	84
1 - 2	14.77	3.00	#VALUE!		751	85
1 - 3	13.30	3.20	#VALUE!		755	85
1 - 4	11.17	3.10	#VALUE!		757	86
1 - 5	5.33	2.90	#VALUE!		754	87
1 - 6	3.20	2.40	#VALUE!		749	88
1 - 7	1.73	2.10	#VALUE!		743	89
1 - 8	0.53	1.90	#VALUE!		740	90
2 - 1		2.60	#VALUE!		743	91
2 - 2		2.75	#VALUE!		746	92
2 - 3		2.75	#VALUE!		748	92
2 - 4		2.80	#VALUE!		748	93
2 - 5		2.80	#VALUE!		749	
2 - 6		2.70	#VALUE!		744	
2 - 7		2.70	#VALUE!		743	
2 - 8		1.90	#VALUE!		740	

AVERAGES: 2.644 1.500 747.38 88.50

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/18/04
 RUN NUMBER: 6 FROM: 16:37 TO: 17:37

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	3.00	#VALUE!	1.50	746	84
1 - 2	14.77	2.95	#VALUE!		747	85
1 - 3	13.30	3.00	#VALUE!		748	85
1 - 4	11.17	3.15	#VALUE!		750	86
1 - 5	5.33	2.70	#VALUE!		750	87
1 - 6	3.20	2.75	#VALUE!		748	88
1 - 7	1.73	2.00	#VALUE!		746	89
1 - 8	0.53	1.50	#VALUE!		740	90
2 - 1		2.15	#VALUE!		742	91
2 - 2		2.75	#VALUE!		743	92
2 - 3		2.75	#VALUE!		747	92
2 - 4		2.85	#VALUE!		751	93
2 - 5		2.90	#VALUE!		751	
2 - 6		2.70	#VALUE!		749	
2 - 7		2.55	#VALUE!		745	
2 - 8		2.50	#VALUE!		740	

AVERAGES: 2.638 1.500 746.44 88.50

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/20/04
 RUN NUMBER: 7 FROM: 12:43 TO: 12:48

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	3.70	#VALUE!	1.50	753	65
1 - 2	14.77	4.00	#VALUE!		755	66
1 - 3	13.30	4.00	#VALUE!		756	67
1 - 4	11.17	4.00	#VALUE!		758	68
1 - 5	5.33	3.65	#VALUE!		759	70
1 - 6	3.20	3.10	#VALUE!		757	72
1 - 7	1.73	3.40	#VALUE!		754	73
1 - 8	0.53	2.70	#VALUE!		750	75
2 - 1		2.70	#VALUE!		750	76
2 - 2		3.90	#VALUE!		752	78
2 - 3		3.70	#VALUE!		752	79
2 - 4		3.70	#VALUE!		756	80
2 - 5		3.60	#VALUE!		759	
2 - 6		3.10	#VALUE!		754	
2 - 7		2.90	#VALUE!		750	
2 - 8		2.90	#VALUE!		745	

AVERAGES: 3.441 1.500 753.75 72.42

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/20/04
 RUN NUMBER: 8 FROM: 14:10 TO: 15:10

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	3.50	#VALUE!	1.50	758	65
1 - 2	14.77	3.95	#VALUE!		760	66
1 - 3	13.30	3.95	#VALUE!		764	67
1 - 4	11.17	3.95	#VALUE!		766	68
1 - 5	5.33	3.50	#VALUE!		766	70
1 - 6	3.20	3.15	#VALUE!		765	72
1 - 7	1.73	2.65	#VALUE!		761	73
1 - 8	0.53	2.85	#VALUE!		758	75
2 - 1		3.00	#VALUE!		755	76
2 - 2		3.55	#VALUE!		757	78
2 - 3		3.60	#VALUE!		761	79
2 - 4		3.70	#VALUE!		765	80
2 - 5		3.50	#VALUE!		767	
2 - 6		3.20	#VALUE!		766	
2 - 7		3.10	#VALUE!		760	
2 - 8		2.60	#VALUE!		755	

AVERAGES: 3.359 1.500 761.50 72.42

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: DISNEY WORLDWIDE SERVICES, INC.
 LOCATION: LAKE BUENA VISTA, FL
 SOURCE: DIESEL NO. 3
 DATE: 5/20/04
 RUN NUMBER: 9 FROM: 15:30 TO: 16:30

SOURCE PARAMETER ENTRIES

PORT-POINT	VELOCITY	ORIFICE	DELTA P	STACK	METER	
"inches"	HEAD	CALC.	ACTUAL	TEMP. F	TEMP. F	
1 - 1	15.97	3.60	#VALUE!	1.50	760	65
1 - 2	14.77	3.55	#VALUE!		760	66
1 - 3	13.30	3.80	#VALUE!		762	67
1 - 4	11.17	3.90	#VALUE!		763	68
1 - 5	5.33	3.50	#VALUE!		761	70
1 - 6	3.20	3.20	#VALUE!		760	72
1 - 7	1.73	2.50	#VALUE!		758	73
1 - 8	0.53	2.40	#VALUE!		755	75
2 - 1		2.70	#VALUE!		753	76
2 - 2		3.50	#VALUE!		755	78
2 - 3		3.60	#VALUE!		760	79
2 - 4		3.60	#VALUE!		763	80
2 - 5		3.50	#VALUE!		767	
2 - 6		2.60	#VALUE!		766	
2 - 7		2.85	#VALUE!		752	
2 - 8		2.65	#VALUE!		750	

AVERAGES: 3.216 1.500 759.06 72.42

AIR CONSULTING and ENGINEERING, INC.
SAMPLE CALCULATIONS

DISNEY WORLDWIDE SERVICES, INC.
LAKE BUENA VISTA, FL
DIESEL NO. 3
5/18/04

RUN NUMBER: 1

METER ACTUAL CU. FEET: $V_m = (V_m \text{ final}) - (V_m \text{ initial})$
 $= (223.71) - (188.7)$
 $= 35.01$

METER STANDARD CU. FEET: $VM_{std} = (K1) * (V_m) * (Y) * \{ (P_{bar}) + [(DH_{avg}) / (13.6)] \} / \{ (TM_{avg}) + (460) \}$
 $= (17.64) * (35.01) * (0.9958) * \{ (30.2) + [(1.5) / (13.6)] \} / \{ (73.1) + (460) \}$
 $= 34.966$

MEASURED SCF MOISTURE: $VW_{std} = (K2) * (V_{lc})$
 $= (0.04707) * (50 + 9.2)$
 $= 2.787$

MEASURED % MOISTURE: $Bwm\% = \{ (VW_{std}) / [(VM_{std}) + (VW_{std})] \} * 100\%$
 $= \{ (2.787) / [(34.966) + (2.787)] \} * 100\%$
 $= 7.38\%$

STACK TEMP. Deg C: $T_{sc} = [(TS_{avg}) - 32] * 5/9$
 $= [(646.9) - 32] * 5/9$
 $= 341.6$

VAPOR PREASURE (in Hg): $P_v = \{ 2.718E[18.6866 - 0.00244 * (273 + (T_{sc})) - 4509.47 / (273 + (T_{sc})) - 149541 / ((273 + (T_{sc}))^2)] \} / 3.375$
 $= \{ 2.718E[18.688 - 0.00244 * (273 + (341.6)) - 4509.47 / (273 + (341.6)) - 149541 / ((273 + (341.6))^2)] \} / 3.375$
 $= 3776.06$

SATURATION MOISTURE %: $Bwsat\% = NA$
 NA
 NA

PERCENT WATER VAPOR: $Bwo\% = Bwm\%$ IF $Bwm\% < Bwsat\%$
 $Bwo\% = Bwsat\%$ IF $Bwsat\% < Bwm\%$
 $= 7.38$

GAS MOLECULAR WT.(dry): $M_d = [(0.440) * (\%CO_2)] + [(0.320) * (\%O_2)] + \{ (0.280) * [(\%N_2) + (\%CO)] \}$
 $= [(0.440) * (\%CO_2)] + [(0.320) * (\%O_2)] + \{ (0.280) * [(100) - (\%CO_2) - (\%O_2)] \}$
 $= [(0.440) * (6.07)] + [(0.032) * (12.76)] + \{ (0.280) * (81.17) \}$
 $= 29.5$

GAS MOLECULAR WT.(wet): $M_s = \{ (M_d) * [1 - (Bwo\% / 100)] \} + \{ (18.0) * (Bwo\% / 100) \}$
 $= \{ (29.5) * [1 - (0.0738)] \} + \{ (18.0) * (0.0738) \}$
 $= 28.63$

PERCENT EXCESS AIR: $\%EA = \{ (\%O_2) / \{ [(0.264) * (\%N_2)] - (\%O_2) \} \} * (100\%)$
 $= \{ (12.76) / \{ [(0.264) * (81.17)] - (12.76) \} \} * (100\%)$
 $= 147.33$

AVERAGE VELOCITY(FPS): $VS_{avg} = (85.48) * (C_p) * (ASRVH) * \{ [(TS_{avg}) + (460)] / [(M_s) * (P_s)] \}^{1/2}$
 $= (85.48) * (0.84) * (1.33) * \{ [(646.9) + (460)] / [(28.6) * (30.13)] \}^{1/2}$
 $= 108.26$

VOLUMETRIC FLOW(ACFM): $QS=(VS_{avg})*(As)*(60)$
 $= (108.26)*(1.485)*(60)$
 $= 9646.3$

VOLUMETRIC FLOW(WVSCFM): $WVSCFM=(QS)*(17.64)*(Bwo\%/100)*(Ps)/(TS_{avg}+460)$
 $= (9646.3)*(17.64)*(7.38/100)*(30.13)/(646.9+460)$
 $= 341.8$

VOLUMETRIC FLOW(DSCFM): $QS_{std}=(QS)*(17.64)*[1-(Bwo\%/100)]*(Ps)/(TS_{avg}+460)$
 $= (9646.3)*(17.64)*[1-(7.38/100)]*(30.13)/(646.9+460)$
 $= 4289.5$

GAS EMISSIONS

NOx POUNDS PER HOUR $NOx\ LB/Hr=(K)*(NOxPPM)*(SCFMD)*(60)$
 $= (0.0000001194)*(671.65)*(4290)*(60)$
 $= 20.6$

NOx POUNDS PER MMBTU $NOx\ LB/MMBTU=(K)*(NOxPPM)*(F)*(20.9)/[(20.9)-(\%O_2)]$
 $= (0.0000001194)*(671.65)*(9190)*(20.9)/[(20.9)-(12.76)]$
 $= 1.893$

CO POUNDS PER HOUR $CO\ LB/Hr=(K)*(CO\ PPM)*(SCFMD)*(60)$
 $= (0.00000007266)*(117.21)*(4290)*(60)$
 $= 2.2$

CO POUNDS PER MMBTU $CO\ LB/MMBTU=(K)*(CO\ PPM)*(F)*(20.9)/[(20.9)-(\%O_2)]$
 $= (0.00000007266)*(117.21)*(9190)*(20.9)/[(20.9)-(12.7642331664783)]$
 $= 0.2$

AIR CONSULTING and ENGINEERING, INC.
NOMENCLATURE

%CO - Percent Carbon Monoxide.
%CO₂ - Percent Carbon Dioxide.
%EA - Percent excess air.
%Iso - Percent isokenetics.
%N₂ - Percent Nitrogen.
%O₂ - Percent Oxygen.
An - Area of the nozzle, square feet.
As - Stack area, square feet.
ASRVH - Average of the square roots of the velocity heads.
Bwm% - Percent water vapor as measured.
Bwo% - Percent water vapor.
Bwsat% - Percent water vapor at saturation.
C₃H₈ - Propane.
CH₄ - Methane.
CO - Carbon Monoxide
CO - Carbon Monoxide.
CO₂ - Carbon Dioxide
C_p - Pitot coefficient.
CSO₂ - Concentration of Sulfur Dioxide, pounds per dry standard cubic foot.
DHavg - Average meter orifice pressure differential.
D_n - Nozzle diameter.
E - Denotes exponent.
F - Fuel factor, standard cubic feet per million BTU.
Gr/SCF - Grains per dry standard cubic foot.
Hr - Hour.
K₁ - A constant = 17.64.
K₂ - A constant = 0.04707.
K₄ - A constant = 0.09450.
lb - pound.
lb/Hr - pounds per hour.
lb/MMBTU - Pounds per million British Thermal Units.
lb/SCF - Pounds per dry standard cubic foot.
M_d - Molecular weight of dry stack gas.
mg - Mass of filter and dried probe wash, milligrams.
MMBTU - million British Thermal Units.
M_s - Molecular weight of wet stack gas.
NO_x - Oxides of Nitrogen.
P_{bar} - Barometric pressure, inches of Mercury.
P_i - A constant = 3.14159....
PPM - Parts per million.
P_s - Stack pressure, inches Mercury.
P_v - Vapor pressure of water at stack temperature, inches Mercury.
Q_s - Volumetric flow rate, actual cubic feet per minute.
Q_{Sstd} - Volumetric flow rate, dry standard cubic feet per minute.
SCF - Standard cubic feet.
SO₂ - Sulfur Dioxide.
TMavg - Average meter temperature, degrees Fahrenheit.
TSavg - Average stack temperature, degrees Fahrenheit.
T_{sc} - Average stack temperature, degrees Celsius.
V_{lc} - Volume of moisture collected in the impingers and silica gel, milliliters.
V_m - Metered volume, actual cubic feet.
V_m final - Final meter reading, actual cubic feet.
V_m initial - Initial meter reading, actual cubic feet.
VMstd - Metered volume corrected to standard conditions, standard cubic feet.
VSavg - Average stack velocity, feet per second.
VWstd - Standard volume of water vapor, standard cubic feet.
WVSCFM - Volumetric flow rate of water vapor, standard cubic feet per minute.
Y - Meter correction factor.

APPENDIX C

**30 SECOND DATA LOGGER
AVERAGES**

AIR CONSULTING & ENGINEERING, INC
 30 SECOND DATA LOGGER AVERAGES

DISNEY WORLDWIDE SERVICES, INC.
 DIESEL NO. 3

Date	Time	Channel 2	Channel 5	Channel 4	Channel 3
		CLD 70S NOx PPMd Average	48H CO PPMd Average	TELEDYN E O2 %d Average	880A CO2 %d Average
5/18/2004	6:57:52	0.05	-0.28	21.17	0.10
5/18/2004	6:58:22	0.00	-0.18	20.99	0.11
5/18/2004	6:58:52	0.00	0.26	20.99	0.10
5/18/2004	6:59:22	0.02	6.74	20.98	0.10
5/18/2004	6:59:52	0.00	5.58	20.97	0.11
5/18/2004	7:00:22	0.01	-0.65	20.97	0.11
5/18/2004	7:00:52	0.01	1.63	20.97	0.11
5/18/2004	7:01:22	0.00	0.53	20.96	0.11
5/18/2004	7:01:52	0.00	1.88	20.97	0.11
5/18/2004	7:02:22	0.02	0.80	21.00	0.11
5/18/2004	7:02:52	0.00	2.10	21.03	0.11
5/18/2004	7:03:22	0.00	1.31	21.07	0.11
5/18/2004	7:03:52	0.05	2.11	21.02	0.11
5/18/2004	7:04:22	0.00	1.06	20.99	0.11
5/18/2004	7:04:52	0.04	1.42	20.98	0.11
5/18/2004	7:05:22	0.03	0.85	21.04	0.11
5/18/2004	7:05:52	0.06	0.59	21.02	0.10
5/18/2004	7:06:22	0.02	1.61	21.01	0.11
5/18/2004	7:06:52	0.00	0.30	21.01	0.12
5/18/2004	7:07:22	0.00	1.74	21.00	0.12
5/18/2004	7:07:52	0.00	0.50	20.97	0.12
5/18/2004	7:08:22	0.00	1.42	20.94	0.10
5/18/2004	7:08:52	626.41	0.66	9.87	0.09
5/18/2004	7:09:22	1285.38	2.15	0.12	0.08
5/18/2004	7:09:52	1293.37	0.90	0.07	0.08
5/18/2004	7:10:22	1251.93	0.34	0.06	0.08
5/18/2004	7:10:52	1247.23	1.33	0.06	0.08
5/18/2004	7:11:22	1248.46	-0.50	0.06	0.08
5/18/2004	7:11:52	1249.26	1.19	0.06	0.08
5/18/2004	7:12:22	750.18	0.83	0.07	0.08
5/18/2004	7:12:52	481.41	0.74	0.02	0.08
5/18/2004	7:13:22	462.83	0.98	0.02	0.08
5/18/2004	7:13:52	459.66	1.01	0.01	0.08
5/18/2004	7:14:22	459.18	1.41	0.01	0.08
5/18/2004	7:14:52	459.26	1.02	0.01	0.08
5/18/2004	7:15:22	584.97	1.60	0.02	0.08
5/18/2004	7:15:52	820.60	0.48	0.02	0.08
5/18/2004	7:16:22	852.86	1.42	0.02	0.08
5/18/2004	7:16:52	861.55	0.56	0.02	0.08
5/18/2004	7:17:22	864.88	0.96	0.02	0.08
5/18/2004	7:17:52	866.03	0.99	0.02	0.08
5/18/2004	7:18:22	866.10	1.02	0.02	0.08
5/18/2004	7:18:52	836.61	1.60	0.06	0.08
5/18/2004	7:19:22	116.43	97.01	0.01	0.08
5/18/2004	7:19:52	7.11	329.56	-0.03	0.08
5/18/2004	7:20:22	0.44	363.80	-0.03	0.08
5/18/2004	7:20:52	0.05	365.88	-0.03	0.08
5/18/2004	7:21:22	0.00	354.56	-0.04	0.08
5/18/2004	7:21:52	0.00	354.14	-0.04	0.08
5/18/2004	7:22:22	0.00	356.20	-0.04	0.08
5/18/2004	7:22:52	0.00	354.48	-0.04	0.08
5/18/2004	7:23:22	0.00	354.55	0.05	0.10
5/18/2004	7:23:52	0.00	238.73	-0.03	0.09
5/18/2004	7:24:22	0.00	72.56	-0.04	0.08
5/18/2004	7:24:52	0.00	58.58	-0.05	0.08

LINEARITY
20.9 O2

ZERO NOx

1242 NOx

448 NOx

854 NOx

357.0 CO

5/18/2004	7:25:22	0.00	59.24	-0.05	0.08	
5/18/2004	7:25:52	0.00	58.30	-0.05	0.08	
5/18/2004	7:26:22	0.00	58.91	-0.05	0.08	58.6 CO
5/18/2004	7:26:52	0.00	58.84	-0.03	0.08	
5/18/2004	7:27:22	0.00	57.45	-0.04	0.08	
5/18/2004	7:27:52	0.00	35.63	-0.05	0.08	
5/18/2004	7:28:22	0.00	32.47	-0.05	0.08	
5/18/2004	7:28:52	0.00	32.59	-0.05	0.08	ZERO O2, CO2
5/18/2004	7:29:22	0.00	32.27	-0.05	0.08	31.3 CO
5/18/2004	7:29:52	0.00	32.72	-0.05	0.08	
5/18/2004	7:30:22	0.48	31.41	4.71	0.08	
5/18/2004	7:30:52	0.23	25.97	6.45	11.04	
5/18/2004	7:31:22	-0.04	3.47	6.11	14.41	
5/18/2004	7:31:52	-0.01	-1.01	6.12	14.52	
5/18/2004	7:32:22	0.00	-1.71	6.12	14.53	
5/18/2004	7:32:52	0.00	-1.30	6.12	15.01	
5/18/2004	7:33:22	0.00	-1.60	6.12	14.99	
5/18/2004	7:33:52	0.00	-1.26	6.12	14.98	5.99 O2, 15.01 CO2
5/18/2004	7:34:22	0.00	-1.31	6.12	14.97	
5/18/2004	7:34:52	0.00	-1.25	6.12	14.96	
5/18/2004	7:35:22	0.00	-1.24	9.21	12.57	
5/18/2004	7:35:52	0.00	-1.01	14.13	5.17	ZERO CO
5/18/2004	7:36:22	0.00	-0.30	14.25	4.94	
5/18/2004	7:36:52	0.02	-0.21	14.25	4.94	
5/18/2004	7:37:22	0.03	-0.24	14.25	4.93	
5/18/2004	7:37:52	0.00	-0.61	14.25	4.93	13.92 O2, 4.987 CO2
5/18/2004	7:38:22	0.00	0.13	14.25	4.93	
5/18/2004	7:38:52	0.01	-0.18	14.25	4.92	
5/18/2004	7:39:22	0.06	0.06	15.90	3.88	
5/18/2004	7:39:52	0.00	-0.23	14.29	4.78	BIAS CHECK
5/18/2004	7:40:22	0.00	0.32	14.17	4.91	ZERO CO
5/18/2004	7:40:52	0.00	-0.51	14.16	4.91	13.92 O2, 4.987 CO2
5/18/2004	7:41:22	0.00	1.38	14.16	4.90	
5/18/2004	7:41:52	0.00	0.48	14.15	4.91	
5/18/2004	7:42:22	0.00	5.64	4.47	2.24	
5/18/2004	7:42:52	0.00	40.89	0.04	0.09	
5/18/2004	7:43:22	0.00	58.31	-0.03	0.08	ZERO O2, CO2
5/18/2004	7:43:52	0.02	58.91	-0.03	0.08	58.6 CO
5/18/2004	7:44:22	0.00	58.64	-0.04	0.08	
5/18/2004	7:44:52	0.00	59.69	-0.04	0.08	
5/18/2004	7:45:22	0.00	58.86	-0.04	0.08	ZERO NOx
5/18/2004	7:45:52	47.22	59.39	0.12	0.08	
5/18/2004	7:46:22	719.76	45.72	0.44	0.08	
5/18/2004	7:46:52	860.14	7.54	0.03	0.08	
5/18/2004	7:47:22	863.52	1.57	0.00	0.08	
5/18/2004	7:47:52	861.78	1.89	0.00	0.08	
5/18/2004	7:48:22	861.76	1.57	0.00	0.08	854 NOx
5/18/2004	7:48:52	861.74	2.14	0.00	0.08	
5/18/2004	7:49:22	860.50	1.75	0.00	0.08	
5/18/2004	7:49:52	619.27	2.12	8.38	0.08	
5/18/2004	7:50:22	765.35	1.52	5.31	0.10	
5/18/2004	7:50:52	1208.78	1.65	0.08	0.08	
5/18/2004	7:51:22	1223.79	1.91	0.02	0.08	
5/18/2004	7:51:52	1228.65	0.56	0.02	0.08	
5/18/2004	7:52:22	1231.85	1.31	0.02	0.08	
5/18/2004	7:52:52	1232.18	-0.34	0.02	0.08	
5/18/2004	7:53:22	1233.72	2.04	0.02	0.08	
5/18/2004	7:53:52	1234.13	1.09	0.02	0.08	1242 NOx
5/18/2004	7:54:22	1234.15	0.97	0.02	0.08	
5/18/2004	7:54:52	1175.91	0.87	2.29	0.08	
5/18/2004	7:55:22	452.08	1.36	15.92	0.10	
5/18/2004	7:55:52	101.96	0.51	19.89	0.14	
5/18/2004	7:56:22	29.95	1.43	20.62	0.15	
5/18/2004	7:56:52	9.59	0.48	20.84	0.16	
5/18/2004	7:57:22	4.30	1.60	20.91	0.16	
5/18/2004	7:57:52	2.00	1.76	20.94	0.16	
5/18/2004	7:58:22	1.02	1.74	20.95	0.16	
5/18/2004	7:58:52	0.00	2.00	20.96	0.16	
5/18/2004	7:59:22	0.02	1.76	20.98	0.16	

5/18/2004	7:59:52	0.02	2.43	20.99	0.16
5/18/2004	8:00:22	0.05	1.69	21.00	0.16
5/18/2004	8:00:52	0.02	2.35	21.00	0.16
5/18/2004	8:01:22	0.02	1.17	21.01	0.16
5/18/2004	8:01:52	0.02	2.29	21.02	0.15
5/18/2004	8:02:22	0.00	0.72	21.02	0.15
5/18/2004	8:02:52	0.02	1.86	21.03	0.15
5/18/2004	8:03:22	0.00	1.14	21.04	0.15
5/18/2004	8:03:52	0.03	2.15	21.05	0.15
5/18/2004	8:04:22	0.00	1.74	21.05	0.14
5/18/2004	8:04:52	0.00	2.07	21.05	0.15
5/18/2004	8:05:22	0.00	2.04	21.06	0.15
5/18/2004	8:05:52	0.00	1.77	21.07	0.15
5/18/2004	8:06:22	0.00	2.39	21.08	0.14
5/18/2004	8:06:52	0.00	1.56	21.09	0.14
5/18/2004	8:07:22	0.00	2.32	21.16	0.13
5/18/2004	8:07:52	0.00	1.56	21.24	0.09
5/18/2004	8:08:22	0.00	2.31	21.25	0.09
5/18/2004	8:08:52	0.00	1.57	21.25	0.09
5/18/2004	8:09:22	0.00	2.20	21.26	0.09
5/18/2004	8:09:52	0.00	1.57	21.27	0.09
5/18/2004	8:10:22	0.00	2.47	21.27	0.09
5/18/2004	8:10:52	0.00	2.05	21.28	0.09
5/18/2004	8:11:22	0.00	2.11	21.29	0.09
5/18/2004	8:11:52	0.00	2.12	21.30	0.09
5/18/2004	8:12:22	0.00	2.11	21.30	0.09
5/18/2004	8:12:52	-0.02	2.38	21.31	0.09
5/18/2004	8:13:22	0.00	2.23	21.32	0.09
5/18/2004	8:13:52	0.00	3.00	21.33	0.09
5/18/2004	8:14:22	0.00	1.75	21.33	0.09
5/18/2004	8:14:52	49.29	6.05	20.23	0.26
5/18/2004	8:15:22	330.50	356.58	16.85	3.03
5/18/2004	8:15:52	246.88	350.43	17.07	2.93
5/18/2004	8:16:22	229.72	196.01	17.21	2.82
5/18/2004	8:16:52	220.93	187.75	17.30	2.75
5/18/2004	8:17:22	217.74	186.83	17.37	2.69
5/18/2004	8:17:52	214.89	182.99	17.43	2.65
5/18/2004	8:18:22	213.59	184.27	17.48	2.61
5/18/2004	8:18:52	212.43	182.33	17.51	2.58
5/18/2004	8:19:22	211.96	183.54	17.53	2.56
5/18/2004	8:19:52	210.47	181.72	17.56	2.54
5/18/2004	8:20:22	210.48	181.98	17.57	2.52
5/18/2004	8:20:52	210.20	181.21	17.59	2.50
5/18/2004	8:21:22	208.53	181.37	17.60	2.49
5/18/2004	8:21:52	207.86	180.05	17.61	2.47
5/18/2004	8:22:22	207.44	178.35	17.62	2.46
5/18/2004	8:22:52	206.38	178.00	17.63	2.45
5/18/2004	8:23:22	206.35	177.30	17.64	2.44
5/18/2004	8:23:52	206.38	177.72	17.64	2.43
5/18/2004	8:24:22	205.01	175.51	17.65	2.43
5/18/2004	8:24:52	204.36	178.11	17.66	2.42
5/18/2004	8:25:22	204.39	175.53	17.66	2.41
5/18/2004	8:25:52	202.74	176.55	17.67	2.40
5/18/2004	8:26:22	202.38	174.33	17.68	2.39
5/18/2004	8:26:52	202.40	175.63	17.68	2.38
5/18/2004	8:27:22	201.32	173.31	17.69	2.38
5/18/2004	8:27:52	200.41	173.60	17.69	2.37
5/18/2004	8:28:22	200.41	173.02	17.70	2.37
5/18/2004	8:28:52	200.42	171.32	17.70	2.37
5/18/2004	8:29:22	198.85	171.90	17.70	2.36
5/18/2004	8:29:52	198.39	171.40	17.71	2.36
5/18/2004	8:30:22	198.40	170.82	17.71	2.36
5/18/2004	8:30:52	198.78	171.84	17.67	2.37
5/18/2004	8:31:22	325.07	360.38	15.40	3.55
5/18/2004	8:31:52	498.45	445.32	13.36	5.26
5/18/2004	8:32:22	565.81	243.13	12.97	5.78
5/18/2004	8:32:52	583.85	157.99	12.89	5.81
5/18/2004	8:33:22	598.08	139.95	12.92	5.81
5/18/2004	8:33:52	606.10	132.18	12.93	5.79

START UP

AVERAGES:

NOx	CO	O2	CO2
213.13	190.62	17.55	2.52

END START UP

5/18/2004	8:34:22	616.07	130.53	12.92	5.80
5/18/2004	8:34:52	627.78	126.58	12.93	5.81
5/18/2004	8:35:22	632.32	124.60	12.95	5.80
5/18/2004	8:35:52	637.03	122.55	12.92	5.82
5/18/2004	8:36:22	644.91	120.26	12.92	5.83
5/18/2004	8:36:52	647.62	121.84	12.94	5.82
5/18/2004	8:37:22	648.26	119.16	12.95	5.82
5/18/2004	8:37:52	651.04	120.40	12.96	5.82
5/18/2004	8:38:22	652.81	118.01	12.97	5.81
5/18/2004	8:38:52	652.39	119.04	12.98	5.81
5/18/2004	8:39:22	651.36	116.98	12.98	5.81
5/18/2004	8:39:52	653.69	118.87	12.97	5.83
5/18/2004	8:40:22	656.08	117.47	12.96	5.84
5/18/2004	8:40:52	656.96	118.63	12.96	5.84
5/18/2004	8:41:22	658.15	117.45	12.97	5.84
5/18/2004	8:41:52	659.29	118.43	12.98	5.83
5/18/2004	8:42:22	658.01	117.66	12.96	5.85
5/18/2004	8:42:52	662.41	117.97	12.96	5.86
5/18/2004	8:43:22	664.52	116.96	12.97	5.86
5/18/2004	8:43:52	662.50	116.12	12.99	5.84
5/18/2004	8:44:22	660.07	116.10	12.99	5.84
5/18/2004	8:44:52	660.23	116.08	12.99	5.84
5/18/2004	8:45:22	659.10	116.89	12.97	5.85
5/18/2004	8:45:52	662.08	115.97	12.96	5.87
5/18/2004	8:46:22	664.45	117.17	12.96	5.87
5/18/2004	8:46:52	664.29	115.80	12.97	5.86
5/18/2004	8:47:22	663.07	116.75	12.98	5.86
5/18/2004	8:47:52	664.44	116.18	12.97	5.86
5/18/2004	8:48:22	667.26	117.73	12.95	5.87
5/18/2004	8:48:52	667.58	116.48	12.95	5.88
5/18/2004	8:49:22	668.22	117.64	12.94	5.88
5/18/2004	8:49:52	669.57	116.74	12.94	5.88
5/18/2004	8:50:22	670.39	117.36	12.94	5.88
5/18/2004	8:50:52	671.77	117.05	12.94	5.88
5/18/2004	8:51:22	671.35	117.34	12.96	5.88
5/18/2004	8:51:52	669.83	116.85	12.96	5.87
5/18/2004	8:52:22	668.14	116.22	12.97	5.86
5/18/2004	8:52:52	666.88	117.17	12.97	5.86
5/18/2004	8:53:22	668.32	116.62	12.97	5.86
5/18/2004	8:53:52	667.67	117.03	12.95	5.87
5/18/2004	8:54:22	669.83	115.78	12.94	5.88
5/18/2004	8:54:52	670.82	116.94	12.94	5.88
5/18/2004	8:55:22	670.88	116.44	12.95	5.87
5/18/2004	8:55:52	669.11	117.80	12.96	5.86
5/18/2004	8:56:22	667.06	117.03	12.95	5.86
5/18/2004	8:56:52	668.43	117.06	12.94	5.87
5/18/2004	8:57:22	668.86	116.55	12.93	5.87
5/18/2004	8:57:52	671.39	116.65	12.91	5.88
5/18/2004	8:58:22	673.95	117.37	12.91	5.88
5/18/2004	8:58:52	674.98	116.83	12.92	5.88
5/18/2004	8:59:22	672.45	117.32	12.94	5.87
5/18/2004	8:59:52	670.84	116.00	12.95	5.86
5/18/2004	9:00:22	670.85	117.23	12.93	5.86
5/18/2004	9:00:52	670.84	116.20	12.93	5.86
5/18/2004	9:01:22	670.82	117.73	12.92	5.87
5/18/2004	9:01:52	671.75	116.25	12.92	5.86
5/18/2004	9:02:22	672.69	116.61	12.94	5.85
5/18/2004	9:02:52	672.38	116.28	12.93	5.85
5/18/2004	9:03:22	672.96	117.12	12.91	5.86
5/18/2004	9:03:52	676.19	117.39	12.93	5.85
5/18/2004	9:04:22	673.31	115.78	12.92	5.85
5/18/2004	9:04:52	673.01	117.14	12.91	5.86
5/18/2004	9:05:22	673.29	115.87	12.91	5.86
5/18/2004	9:05:52	671.38	117.73	12.92	5.85
5/18/2004	9:06:22	670.41	116.36	12.91	5.84
5/18/2004	9:06:52	670.89	117.92	12.87	5.86
5/18/2004	9:07:22	677.02	117.44	12.85	5.88
5/18/2004	9:07:52	680.50	117.48	12.87	5.87
5/18/2004	9:08:22	676.69	116.27	12.88	5.86

START RUN 1 60% LOAD

AVERAGES:

NOx	CO	O2	CO2
670.24	116.71	12.88	5.86

5/18/2004	9:08:52	676.80	117.11	12.87	5.86
5/18/2004	9:09:22	678.25	117.83	12.88	5.85
5/18/2004	9:09:52	674.82	116.82	12.88	5.84
5/18/2004	9:10:22	674.65	117.32	12.88	5.85
5/18/2004	9:10:52	673.31	117.22	12.86	5.85
5/18/2004	9:11:22	675.37	118.23	12.83	5.87
5/18/2004	9:11:52	679.80	115.90	12.83	5.87
5/18/2004	9:12:22	681.50	117.71	12.83	5.87
5/18/2004	9:12:52	681.56	115.98	12.83	5.86
5/18/2004	9:13:22	678.82	116.93	12.84	5.85
5/18/2004	9:13:52	676.26	117.08	12.81	5.86
5/18/2004	9:14:22	679.92	118.05	12.79	5.88
5/18/2004	9:14:52	684.41	117.42	12.81	5.87
5/18/2004	9:15:22	682.99	116.10	12.82	5.85
5/18/2004	9:15:52	681.83	116.45	12.83	5.85
5/18/2004	9:16:22	679.22	115.76	12.83	5.84
5/18/2004	9:16:52	677.13	116.50	12.82	5.84
5/18/2004	9:17:22	678.33	116.15	12.81	5.85
5/18/2004	9:17:52	680.58	116.89	12.82	5.84
5/18/2004	9:18:22	678.17	115.98	12.83	5.83
5/18/2004	9:18:52	677.31	117.35	12.81	5.84
5/18/2004	9:19:22	677.77	116.13	12.80	5.85
5/18/2004	9:19:52	680.04	116.90	12.78	5.86
5/18/2004	9:20:22	681.40	116.21	12.79	5.86
5/18/2004	9:20:52	679.98	116.47	12.80	5.85
5/18/2004	9:21:22	680.56	117.72	12.80	5.85
5/18/2004	9:21:52	682.01	115.75	12.83	5.84
5/18/2004	9:22:22	683.04	116.07	12.83	5.83
5/18/2004	9:22:52	682.23	115.54	12.81	5.84
5/18/2004	9:23:22	681.96	117.03	12.79	5.85
5/18/2004	9:23:52	684.04	115.98	12.76	5.88
5/18/2004	9:24:22	687.66	117.35	12.78	5.87
5/18/2004	9:24:52	686.66	115.34	12.78	5.86
5/18/2004	9:25:22	683.48	116.18	12.78	5.86
5/18/2004	9:25:52	682.99	116.09	12.78	5.86
5/18/2004	9:26:22	683.17	115.94	12.79	5.85
5/18/2004	9:26:52	681.75	115.55	12.79	5.85
5/18/2004	9:27:22	683.73	115.31	12.80	5.84
5/18/2004	9:27:52	680.84	115.88	12.80	5.84
5/18/2004	9:28:22	681.75	114.52	12.78	5.86
5/18/2004	9:28:52	681.90	116.01	12.78	5.86
5/18/2004	9:29:22	496.77	114.42	13.10	5.86
5/18/2004	9:29:52	667.07	115.56	12.79	5.83
5/18/2004	9:30:22	661.46	114.84	12.78	5.84
5/18/2004	9:30:52	664.70	115.95	12.79	5.83
5/18/2004	9:31:22	664.19	114.56	12.79	5.82
5/18/2004	9:31:52	664.69	114.69	12.76	5.83
5/18/2004	9:32:22	667.87	116.43	12.74	5.85
5/18/2004	9:32:52	668.19	115.70	12.85	5.86
5/18/2004	9:33:22	668.80	116.17	12.75	5.85
5/18/2004	9:33:52	668.83	115.34	12.74	5.85
5/18/2004	9:34:22	670.47	117.20	12.73	5.86
5/18/2004	9:34:52	673.06	115.42	12.73	5.86
5/18/2004	9:35:22	672.62	116.10	12.71	5.86
5/18/2004	9:35:52	674.31	116.06	12.67	5.88
5/18/2004	9:36:22	672.55	116.81	12.90	5.88
5/18/2004	9:36:52	669.19	116.86	12.69	5.85
5/18/2004	9:37:22	670.40	116.06	12.68	5.86
5/18/2004	9:37:52	670.77	116.48	12.85	5.86
5/18/2004	9:38:22	508.43	114.84	14.53	5.85
5/18/2004	9:38:52	468.95	107.97	15.61	5.17
5/18/2004	9:39:22	119.55	53.25	14.72	3.39
5/18/2004	9:39:52	36.45	10.42	16.29	3.04
5/18/2004	9:40:22	18.10	0.31	14.92	3.69
5/18/2004	9:40:52	15.73	-0.88	13.99	4.66
5/18/2004	9:41:22	14.14	-0.89	14.20	4.65
5/18/2004	9:41:52	13.16	-1.06	14.56	4.33
5/18/2004	9:42:22	11.62	-0.05	14.10	4.52
5/18/2004	9:42:52	10.34	-1.50	13.94	4.74

END RUN 1

5/18/2004	9:43:22	9.60	-0.28	13.93	4.74	
5/18/2004	9:43:52	8.95	-1.17	13.93	4.74	13.92 O2, 4.987CO2
5/18/2004	9:44:22	7.71	-0.50	13.93	4.74	
5/18/2004	9:44:52	16.45	-0.74	13.46	4.74	
5/18/2004	9:45:22	338.43	-0.48	9.88	3.79	
5/18/2004	9:45:52	167.05	1.19	18.03	0.99	
5/18/2004	9:46:22	271.18	0.16	10.49	0.18	
5/18/2004	9:46:52	784.20	1.28	0.52	0.08	
5/18/2004	9:47:22	839.10	-0.51	0.06	0.08	
5/18/2004	9:47:52	841.68	0.95	0.04	0.08	ZERO CO
5/18/2004	9:48:22	841.63	-0.11	0.03	0.08	854 NOx
5/18/2004	9:48:52	841.62	0.69	0.03	0.08	
5/18/2004	9:49:22	841.61	1.33	0.02	0.08	
5/18/2004	9:49:52	707.33	1.22	0.09	0.08	
5/18/2004	9:50:22	55.21	25.51	-0.01	0.08	
5/18/2004	9:50:52	6.87	54.62	-0.03	0.08	ZERO O2, CO2
5/18/2004	9:51:22	5.66	58.22	-0.03	0.08	
5/18/2004	9:51:52	5.55	57.38	-0.03	0.08	
5/18/2004	9:52:22	3.76	58.66	-0.03	0.08	
5/18/2004	9:52:52	3.73	57.54	-0.03	0.08	
5/18/2004	9:53:22	3.71	58.23	-0.03	0.08	
5/18/2004	9:53:52	162.17	57.69	6.55	0.80	58.6 CO
5/18/2004	9:54:22	642.41	75.72	12.46	5.51	
5/18/2004	9:54:52	682.19	110.69	12.60	5.87	
5/18/2004	9:55:22	684.98	114.62	12.63	5.88	
5/18/2004	9:55:52	683.74	114.83	12.64	5.87	
5/18/2004	9:56:22	682.65	113.60	12.63	5.88	
5/18/2004	9:56:52	682.44	113.91	12.63	5.88	
5/18/2004	9:57:22	683.19	112.72	12.64	5.88	
5/18/2004	9:57:52	681.24	114.19	12.62	5.88	
5/18/2004	9:58:22	682.77	114.69	12.60	5.90	
5/18/2004	9:58:52	686.95	113.80	12.61	5.90	
5/18/2004	9:59:22	686.92	114.44	12.60	5.90	
5/18/2004	9:59:52	690.42	113.60	12.60	5.91	
5/18/2004	10:00:22	691.73	114.34	12.57	5.92	
5/18/2004	10:00:52	695.36	113.45	12.54	5.94	
5/18/2004	10:01:22	700.09	116.68	12.56	5.95	
5/18/2004	10:01:52	640.08	115.07	14.27	5.68	
5/18/2004	10:02:22	200.77	80.75	18.79	1.23	
5/18/2004	10:02:52	572.90	44.10	13.24	4.69	
5/18/2004	10:03:22	697.60	98.42	12.57	5.92	
5/18/2004	10:03:52	694.48	113.11	12.59	5.90	BEGIN RUN 2 60% LOAD
5/18/2004	10:04:22	689.06	112.33	12.59	5.89	AVERAGES:
5/18/2004	10:04:52	686.88	114.73	12.58	5.89	NOx CO O2 CO2
5/18/2004	10:05:22	689.84	113.13	12.59	5.89	697.46 112.76 12.46 5.84
5/18/2004	10:05:52	688.51	113.39	12.61	5.87	
5/18/2004	10:06:22	684.13	113.32	12.60	5.87	
5/18/2004	10:06:52	687.35	113.15	12.57	5.89	
5/18/2004	10:07:22	689.09	113.94	12.57	5.88	
5/18/2004	10:07:52	689.30	113.12	12.55	5.89	
5/18/2004	10:08:22	695.95	115.15	12.54	5.90	
5/18/2004	10:08:52	698.23	112.79	12.54	5.90	
5/18/2004	10:09:22	699.02	113.97	12.54	5.90	
5/18/2004	10:09:52	696.29	113.13	12.54	5.89	
5/18/2004	10:10:22	698.60	114.14	12.54	5.89	
5/18/2004	10:10:52	699.02	113.93	12.54	5.89	
5/18/2004	10:11:22	696.48	112.23	12.56	5.87	
5/18/2004	10:11:52	694.36	113.34	12.58	5.86	
5/18/2004	10:12:22	689.99	112.52	12.57	5.85	
5/18/2004	10:12:52	691.66	114.35	12.57	5.86	
5/18/2004	10:13:22	692.11	111.87	12.58	5.85	
5/18/2004	10:13:52	690.78	113.84	12.58	5.84	
5/18/2004	10:14:22	689.84	113.53	12.58	5.83	
5/18/2004	10:14:52	690.19	113.21	12.56	5.84	
5/18/2004	10:15:22	689.96	114.64	12.54	5.85	
5/18/2004	10:15:52	694.61	114.49	12.53	5.85	
5/18/2004	10:16:22	695.03	116.15	12.55	5.84	
5/18/2004	10:16:52	693.02	113.56	12.56	5.83	
5/18/2004	10:17:22	691.86	113.15	12.56	5.82	

5/18/2004	10:17:52	693.24	112.84	12.54	5.83
5/18/2004	10:18:22	693.95	112.80	12.54	5.84
5/18/2004	10:18:52	696.07	114.42	12.51	5.84
5/18/2004	10:19:22	697.41	114.77	12.54	5.83
5/18/2004	10:19:52	694.96	115.34	12.54	5.83
5/18/2004	10:20:22	695.74	113.73	12.54	5.82
5/18/2004	10:20:52	693.33	114.91	12.55	5.82
5/18/2004	10:21:22	693.59	114.00	12.54	5.82
5/18/2004	10:21:52	697.39	113.15	12.53	5.82
5/18/2004	10:22:22	694.63	114.44	12.53	5.81
5/18/2004	10:22:52	697.11	114.15	12.54	5.81
5/18/2004	10:23:22	694.11	114.64	12.55	5.80
5/18/2004	10:23:52	694.05	113.20	12.54	5.80
5/18/2004	10:24:22	694.10	114.31	12.54	5.80
5/18/2004	10:24:52	693.91	113.19	12.54	5.79
5/18/2004	10:25:22	693.27	114.96	12.52	5.80
5/18/2004	10:25:52	694.50	113.50	12.52	5.80
5/18/2004	10:26:22	693.15	114.13	12.51	5.80
5/18/2004	10:26:52	696.47	113.84	12.52	5.79
5/18/2004	10:27:22	694.94	112.53	12.51	5.79
5/18/2004	10:27:52	696.55	114.80	12.48	5.81
5/18/2004	10:28:22	699.56	113.73	12.47	5.82
5/18/2004	10:28:52	702.31	113.57	12.47	5.82
5/18/2004	10:29:22	703.11	114.28	12.48	5.81
5/18/2004	10:29:52	703.19	114.13	12.49	5.81
5/18/2004	10:30:22	704.22	113.54	12.51	5.79
5/18/2004	10:30:52	700.09	112.30	12.52	5.77
5/18/2004	10:31:22	697.21	112.73	12.53	5.77
5/18/2004	10:31:52	698.00	111.36	12.52	5.77
5/18/2004	10:32:22	698.33	112.85	12.49	5.78
5/18/2004	10:32:52	699.48	112.67	12.49	5.79
5/18/2004	10:33:22	701.09	112.81	12.49	5.79
5/18/2004	10:33:52	704.58	113.63	12.47	5.79
5/18/2004	10:34:22	707.86	111.53	12.47	5.80
5/18/2004	10:34:52	704.86	113.39	12.48	5.78
5/18/2004	10:35:22	703.79	112.13	12.47	5.79
5/18/2004	10:35:52	706.72	112.97	12.44	5.80
5/18/2004	10:36:22	708.74	112.92	12.47	5.80
5/18/2004	10:36:52	703.15	112.92	12.48	5.78
5/18/2004	10:37:22	703.69	113.34	12.48	5.78
5/18/2004	10:37:52	702.84	112.60	12.51	5.76
5/18/2004	10:38:22	700.36	113.56	12.50	5.76
5/18/2004	10:38:52	699.00	112.80	12.50	5.76
5/18/2004	10:39:22	697.09	114.04	12.48	5.77
5/18/2004	10:39:52	699.11	113.78	12.47	5.78
5/18/2004	10:40:22	701.03	113.18	12.46	5.78
5/18/2004	10:40:52	704.81	114.38	12.44	5.80
5/18/2004	10:41:22	706.17	113.37	12.43	5.80
5/18/2004	10:41:52	709.31	114.86	12.43	5.80
5/18/2004	10:42:22	707.19	113.80	12.42	5.81
5/18/2004	10:42:52	710.11	113.92	12.41	5.82
5/18/2004	10:43:22	710.86	113.78	12.43	5.80
5/18/2004	10:43:52	708.18	112.57	12.43	5.80
5/18/2004	10:44:22	707.23	114.47	12.40	5.81
5/18/2004	10:44:52	712.14	113.66	12.40	5.82
5/18/2004	10:45:22	711.13	114.17	12.42	5.81
5/18/2004	10:45:52	709.10	112.49	12.44	5.80
5/18/2004	10:46:22	706.77	113.55	12.44	5.79
5/18/2004	10:46:52	702.92	114.10	12.44	5.79
5/18/2004	10:47:22	702.64	114.13	12.42	5.80
5/18/2004	10:47:52	704.53	114.88	12.44	5.80
5/18/2004	10:48:22	701.54	112.92	12.46	5.78
5/18/2004	10:48:52	700.80	114.08	12.45	5.78
5/18/2004	10:49:22	700.34	113.07	12.46	5.78
5/18/2004	10:49:52	698.99	112.31	12.48	5.76
5/18/2004	10:50:22	697.59	112.03	12.49	5.75
5/18/2004	10:50:52	696.35	112.00	12.48	5.76
5/18/2004	10:51:22	696.60	114.19	12.47	5.76
5/18/2004	10:51:52	694.46	111.99	12.48	5.76

5/18/2004	10:52:22	692.96	112.84	12.46	5.77	
5/18/2004	10:52:52	697.02	113.55	12.45	5.78	
5/18/2004	10:53:22	699.00	112.26	12.47	5.77	
5/18/2004	10:53:52	695.34	112.05	12.48	5.76	
5/18/2004	10:54:22	694.45	111.70	12.47	5.76	
5/18/2004	10:54:52	696.63	113.33	12.45	5.78	
5/18/2004	10:55:22	678.97	112.48	12.45	5.78	
5/18/2004	10:55:52	5.38	111.51	17.36	1.69	LOST POWER TO PUMPS AND A/C
5/18/2004	10:56:22	-0.03	81.09	20.34	0.10	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	10:56:52	0.00	32.82	20.40	0.10	LOST POWER TO PUMPS AND A/C
5/18/2004	10:57:22	0.00	12.94	20.39	0.10	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	10:57:52	0.00	4.70	20.38	0.10	LOST POWER TO PUMPS AND A/C
5/18/2004	10:58:22	0.00	1.94	20.37	0.10	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	10:58:52	0.00	1.22	20.36	0.10	LOST POWER TO PUMPS AND A/C
5/18/2004	10:59:22	-0.05	-0.81	20.35	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	10:59:52	0.00	-0.50	20.34	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:00:22	0.00	-0.41	20.34	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:00:52	0.00	-1.31	20.33	0.10	LOST POWER TO PUMPS AND A/C
5/18/2004	11:01:22	-0.12	-1.04	20.31	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:01:52	-0.11	-1.50	20.30	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:02:22	-0.08	-1.50	20.29	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:02:52	-0.04	-1.19	20.28	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:03:22	-0.14	-1.94	20.27	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:03:52	0.00	-1.93	20.28	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:04:22	-0.07	-1.93	20.29	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:04:52	-0.03	-2.57	20.28	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:05:22	-0.13	-1.95	20.27	0.08	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:05:52	-0.07	-2.11	20.26	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:06:22	-0.10	-3.01	20.25	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:06:52	0.00	-3.01	20.24	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:07:22	0.00	-2.82	20.23	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:07:52	-0.05	-3.01	20.22	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:08:22	-0.03	-3.66	20.21	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:08:52	-0.02	-3.03	20.20	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:09:22	0.00	-3.15	20.19	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:09:52	0.00	-3.85	20.18	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:10:22	-0.02	-3.16	20.17	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:10:52	-0.05	-3.03	20.17	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:11:22	-0.02	-3.74	20.16	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:11:52	-0.12	-3.43	20.16	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:12:22	-0.01	-3.05	20.15	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:12:52	-0.08	-3.20	20.15	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:13:22	0.00	-4.19	20.14	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:13:52	-0.02	-3.72	20.14	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:14:22	0.00	-3.07	20.13	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:14:52	0.00	-4.36	20.13	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:15:22	-0.02	-4.06	20.12	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:15:52	0.00	-3.22	20.12	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:16:22	-0.06	-3.23	20.11	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:16:52	-0.09	-4.24	20.10	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:17:22	-0.11	-3.23	20.10	0.09	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:17:52	-0.02	-3.09	19.50	0.09	LOST POWER TO PUMPS AND A/C
5/18/2004	11:18:22	-0.03	18.56	12.94	4.21	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:18:52	0.00	95.16	12.27	5.64	LOST POWER TO PUMPS AND A/C
5/18/2004	11:19:22	0.00	109.56	12.23	5.72	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:19:52	0.00	110.18	12.22	5.75	LOST POWER TO PUMPS AND A/C
5/18/2004	11:20:22	0.00	110.14	12.21	5.77	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:20:52	0.00	110.15	12.20	5.81	LOST POWER TO PUMPS AND A/C
5/18/2004	11:21:22	0.00	110.29	12.19	5.84	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:21:52	0.00	111.02	12.22	5.86	LOST POWER TO PUMPS AND A/C
5/18/2004	11:22:22	0.00	110.30	12.24	5.86	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:22:52	0.09	108.38	12.23	5.88	LOST POWER TO PUMPS AND A/C
5/18/2004	11:23:22	330.88	108.24	12.25	5.89	DATA NOT INCLUDED IN RUN AVERAGE
5/18/2004	11:23:52	685.07	108.50	12.26	5.88	
5/18/2004	11:24:22	685.99	108.23	12.26	5.89	
5/18/2004	11:24:52	686.68	108.22	12.23	5.92	
5/18/2004	11:25:22	688.81	108.66	12.20	5.95	
5/18/2004	11:25:52	693.41	109.91	12.18	5.98	
5/18/2004	11:26:22	696.50	109.34	12.19	5.98	

5/18/2004	11:26:52	695.28	109.36	12.18	5.99	
5/18/2004	11:27:22	696.87	109.36	12.18	6.00	
5/18/2004	11:27:52	697.92	108.20	12.17	6.01	
5/18/2004	11:28:22	697.60	108.61	12.18	6.01	
5/18/2004	11:28:52	697.02	109.55	12.16	6.02	
5/18/2004	11:29:22	698.75	110.83	12.16	6.03	
5/18/2004	11:29:52	699.36	109.99	12.17	6.02	
5/18/2004	11:30:22	696.07	107.46	12.20	6.01	
5/18/2004	11:30:52	694.38	108.02	12.19	6.00	
5/18/2004	11:31:22	696.03	108.20	12.19	6.01	
5/18/2004	11:31:52	694.88	108.67	12.17	6.02	
5/18/2004	11:32:22	694.22	109.01	12.18	6.02	
5/18/2004	11:32:52	693.10	109.00	12.19	6.01	END RUN 2
5/18/2004	11:33:22	690.01	107.82	12.18	6.01	
5/18/2004	11:33:52	689.56	108.49	12.16	6.02	
5/18/2004	11:34:22	692.09	108.59	12.17	6.02	
5/18/2004	11:34:52	691.68	107.86	12.18	6.01	
5/18/2004	11:35:22	688.38	108.18	12.20	6.00	
5/18/2004	11:35:52	686.92	107.04	12.20	6.00	
5/18/2004	11:36:22	691.95	107.10	12.20	6.00	
5/18/2004	11:36:52	578.83	106.58	14.19	5.90	
5/18/2004	11:37:22	172.96	76.93	19.02	2.41	
5/18/2004	11:37:52	45.06	17.62	19.86	0.36	
5/18/2004	11:38:22	22.73	-1.77	17.74	0.89	
5/18/2004	11:38:52	16.29	-5.37	14.24	3.38	
5/18/2004	11:39:22	13.93	-5.93	13.55	4.77	
5/18/2004	11:39:52	13.53	-5.95	13.52	4.82	
5/18/2004	11:40:22	11.65	-5.95	13.51	4.82	13.92 O2, 4.987 CO2
5/18/2004	11:40:52	11.46	-5.96	13.50	4.82	ZERO CO
5/18/2004	11:41:22	9.66	-5.95	13.49	4.83	
5/18/2004	11:41:52	9.66	-5.63	9.31	4.10	
5/18/2004	11:42:22	9.14	16.85	0.41	0.28	
5/18/2004	11:42:52	7.82	47.49	0.02	0.08	ZERO NOx
5/18/2004	11:43:22	7.86	50.99	0.00	0.08	
5/18/2004	11:43:52	6.59	50.99	0.00	0.08	58.6 CO
5/18/2004	11:44:22	5.76	50.95	-0.01	0.07	
5/18/2004	11:44:52	82.92	51.31	0.01	0.07	
5/18/2004	11:45:22	704.29	34.30	0.03	0.07	ZERO O2, CO2
5/18/2004	11:45:52	797.59	-0.57	0.03	0.07	
5/18/2004	11:46:22	798.81	-5.50	0.03	0.07	
5/18/2004	11:46:52	798.80	-5.93	0.03	0.07	
5/18/2004	11:47:22	798.76	-5.94	0.03	0.07	854 NOx
5/18/2004	11:47:52	798.79	-5.95	0.03	0.07	
5/18/2004	11:48:22	798.75	-5.95	0.03	0.07	
5/18/2004	11:48:52	778.44	-5.95	1.64	0.07	
5/18/2004	11:49:22	297.30	-5.72	15.52	0.08	
5/18/2004	11:49:52	34.45	-5.99	19.88	0.09	
5/18/2004	11:50:22	4.17	-5.99	20.23	0.09	
5/18/2004	11:50:52	3.82	-5.97	20.25	0.09	
5/18/2004	11:51:22	3.77	-5.99	20.25	0.09	
5/18/2004	11:51:52	3.79	-6.00	20.25	0.09	
5/18/2004	11:52:22	3.81	-5.98	20.23	0.09	
5/18/2004	11:52:52	3.78	-5.99	20.23	0.09	
5/18/2004	11:53:22	3.81	-6.00	20.23	0.09	
5/18/2004	11:53:52	3.59	-5.98	20.22	0.09	
5/18/2004	11:54:22	1.85	-6.02	20.22	0.09	
5/18/2004	11:54:52	2.32	-6.80	20.22	0.09	
5/18/2004	11:55:22	3.79	-6.22	20.23	0.09	
5/18/2004	11:55:52	3.83	-6.74	20.22	0.09	
5/18/2004	11:56:22	3.79	-6.89	20.22	0.09	
5/18/2004	11:56:52	3.80	-6.76	20.21	0.09	
5/18/2004	11:57:22	3.78	-6.24	20.21	0.10	
5/18/2004	11:57:52	3.27	-6.19	20.22	0.09	
5/18/2004	11:58:22	1.83	-6.56	20.22	0.09	
5/18/2004	11:58:52	1.87	-7.08	20.22	0.09	
5/18/2004	11:59:22	1.82	-7.08	20.23	0.09	
5/18/2004	11:59:52	1.85	-7.07	20.23	0.09	
5/18/2004	12:00:22	1.84	-7.05	20.24	0.09	
5/18/2004	12:00:52	1.87	-7.03	20.25	0.09	

5/18/2004	12:01:22	1.83	-7.08	20.25	0.10	
5/18/2004	12:01:52	1.85	-7.05	20.26	0.10	ADJ O2 ANALYZER
5/18/2004	12:02:22	1.81	-7.07	20.93	0.10	
5/18/2004	12:02:52	1.89	-7.05	20.96	0.10	
5/18/2004	12:03:22	1.85	-7.29	20.94	0.11	
5/18/2004	12:03:52	3.47	-7.21	20.95	0.11	
5/18/2004	12:04:22	1.88	-7.05	20.96	0.11	20.9 O2
5/18/2004	12:04:52	2.07	-7.05	20.55	0.11	
5/18/2004	12:05:22	1.64	-6.25	14.63	3.71	
5/18/2004	12:05:52	0.02	-4.67	14.04	4.92	
5/18/2004	12:06:22	0.11	0.15	14.03	4.95	
5/18/2004	12:06:52	0.00	-1.15	14.04	4.95	13.92 O2, 4.987 CO2
5/18/2004	12:07:22	0.00	-1.30	14.04	4.96	
5/18/2004	12:07:52	0.00	-1.32	13.53	4.96	
5/18/2004	12:08:22	0.22	8.19	1.55	1.41	
5/18/2004	12:08:52	0.21	46.99	0.03	0.08	
5/18/2004	12:09:22	0.16	58.30	0.00	0.07	
5/18/2004	12:09:52	0.07	57.14	-0.01	0.07	ZERO O2 CO2
5/18/2004	12:10:22	0.02	57.80	-0.01	0.07	58.6 CO
5/18/2004	12:10:52	20.87	58.18	0.03	0.07	
5/18/2004	12:11:22	354.17	44.96	0.04	0.07	
5/18/2004	12:11:52	422.66	8.08	0.01	0.07	
5/18/2004	12:12:22	422.77	1.02	0.02	0.07	
5/18/2004	12:12:52	422.71	-0.20	0.05	0.07	
5/18/2004	12:13:22	439.12	-0.21	0.54	0.07	ZERO CO
5/18/2004	12:13:52	426.27	-0.21	0.03	0.07	
5/18/2004	12:14:22	590.10	0.98	0.12	0.07	
5/18/2004	12:14:52	796.28	0.69	0.03	0.07	
5/18/2004	12:15:22	806.47	0.06	0.03	0.07	
5/18/2004	12:15:52	855.01	0.03	0.03	0.07	ADJ NOx ANALYZER
5/18/2004	12:16:22	855.09	0.76	0.03	0.07	
5/18/2004	12:16:52	855.09	1.18	0.02	0.07	854 NOx
5/18/2004	12:17:22	855.11	1.14	0.02	0.07	
5/18/2004	12:17:52	743.30	0.39	0.01	0.07	
5/18/2004	12:18:22	460.74	-0.23	0.00	0.07	
5/18/2004	12:18:52	452.88	0.02	-0.01	0.07	
5/18/2004	12:19:22	452.96	0.71	-0.01	0.07	
5/18/2004	12:19:52	452.95	1.12	-0.01	0.07	448 NOx
5/18/2004	12:20:22	452.86	-0.07	-0.01	0.07	
5/18/2004	12:20:52	452.94	0.49	0.03	0.07	
5/18/2004	12:21:22	169.49	0.42	10.49	3.84	
5/18/2004	12:21:52	3.99	-0.44	14.06	4.93	
5/18/2004	12:22:22	0.00	-1.28	14.11	4.93	ZERO NOx
5/18/2004	12:22:52	0.00	-1.88	14.12	4.93	
5/18/2004	12:23:22	0.02	-1.13	14.14	4.93	
5/18/2004	12:23:52	-0.02	-0.22	14.14	4.93	
5/18/2004	12:24:22	0.00	-0.78	14.52	4.92	
5/18/2004	12:24:52	3.04	-1.26	19.35	2.97	
5/18/2004	12:25:22	11.37	-0.78	20.62	0.48	
5/18/2004	12:25:52	568.20	15.53	13.79	4.32	
5/18/2004	12:26:22	740.62	92.73	12.76	6.15	
5/18/2004	12:26:52	744.78	115.30	12.71	6.19	BEGIN RUN 3 60% LOAD
5/18/2004	12:27:22	750.58	115.89	12.70	6.20	AVERAGES:
5/18/2004	12:27:52	754.78	116.95	12.68	6.21	NOX CO O2 CO2
5/18/2004	12:28:22	757.49	116.35	12.69	6.20	757.27 116.52 12.73 6.00
5/18/2004	12:28:52	756.15	116.19	12.71	6.19	
5/18/2004	12:29:22	755.62	115.12	12.73	6.17	
5/18/2004	12:29:52	754.03	115.04	12.74	6.16	
5/18/2004	12:30:22	754.72	115.16	12.75	6.15	
5/18/2004	12:30:52	756.92	115.16	12.75	6.14	
5/18/2004	12:31:22	755.48	114.49	12.74	6.14	
5/18/2004	12:31:52	754.25	114.72	12.72	6.15	
5/18/2004	12:32:22	757.58	116.22	12.72	6.16	
5/18/2004	12:32:52	759.81	115.66	12.73	6.15	
5/18/2004	12:33:22	757.11	114.52	12.75	6.13	
5/18/2004	12:33:52	755.15	114.59	12.74	6.13	
5/18/2004	12:34:22	753.54	115.34	12.73	6.13	
5/18/2004	12:34:52	754.00	117.46	12.72	6.14	
5/18/2004	12:35:22	755.76	116.32	12.73	6.13	

5/18/2004	12:35:52	753.08	115.18	12.76	6.10
5/18/2004	12:36:22	752.25	114.55	12.77	6.09
5/18/2004	12:36:52	753.66	115.31	12.75	6.09
5/18/2004	12:37:22	752.38	116.03	12.74	6.10
5/18/2004	12:37:52	756.66	115.19	12.75	6.09
5/18/2004	12:38:22	757.84	115.36	12.75	6.09
5/18/2004	12:38:52	759.90	116.34	12.76	6.08
5/18/2004	12:39:22	755.86	115.79	12.75	6.07
5/18/2004	12:39:52	759.29	115.38	12.72	6.09
5/18/2004	12:40:22	762.20	116.55	12.74	6.08
5/18/2004	12:40:52	764.24	116.24	12.75	6.06
5/18/2004	12:41:22	762.83	115.38	12.77	6.05
5/18/2004	12:41:52	758.72	115.73	12.75	6.05
5/18/2004	12:42:22	759.40	116.24	12.75	6.05
5/18/2004	12:42:52	759.25	116.23	12.76	6.04
5/18/2004	12:43:22	758.83	114.87	12.76	6.04
5/18/2004	12:43:52	758.08	114.31	12.77	6.02
5/18/2004	12:44:22	757.90	114.29	12.78	6.01
5/18/2004	12:44:52	757.23	115.59	12.78	6.01
5/18/2004	12:45:22	757.24	114.99	12.79	6.00
5/18/2004	12:45:52	755.38	115.73	12.79	5.99
5/18/2004	12:46:22	755.96	117.15	12.78	5.99
5/18/2004	12:46:52	757.74	117.28	12.77	5.99
5/18/2004	12:47:22	758.68	115.72	12.77	5.99
5/18/2004	12:47:52	758.43	115.08	12.79	5.97
5/18/2004	12:48:22	754.54	115.40	12.80	5.96
5/18/2004	12:48:52	749.85	115.72	12.79	5.96
5/18/2004	12:49:22	751.34	114.59	12.77	5.97
5/18/2004	12:49:52	753.32	115.08	12.81	5.95
5/18/2004	12:50:22	751.75	114.49	12.82	5.93
5/18/2004	12:50:52	748.25	115.73	12.78	5.95
5/18/2004	12:51:22	749.90	116.59	12.78	5.95
5/18/2004	12:51:52	747.95	116.84	12.74	5.97
5/18/2004	12:52:22	753.52	118.61	12.74	5.97
5/18/2004	12:52:52	756.66	118.82	12.76	5.96
5/18/2004	12:53:22	754.32	115.95	12.75	5.96
5/18/2004	12:53:52	753.25	116.59	12.76	5.96
5/18/2004	12:54:22	749.45	117.30	12.74	5.96
5/18/2004	12:54:52	750.49	118.67	12.72	5.97
5/18/2004	12:55:22	757.00	117.22	12.73	5.97
5/18/2004	12:55:52	754.93	117.46	12.70	5.98
5/18/2004	12:56:22	759.48	118.59	12.69	5.99
5/18/2004	12:56:52	760.52	118.84	12.69	5.99
5/18/2004	12:57:22	761.22	117.30	12.73	5.96
5/18/2004	12:57:52	759.35	116.51	12.74	5.95
5/18/2004	12:58:22	757.68	117.23	12.73	5.96
5/18/2004	12:58:52	762.48	117.78	12.75	5.95
5/18/2004	12:59:22	758.61	116.25	12.74	5.94
5/18/2004	12:59:52	755.41	116.40	12.73	5.94
5/18/2004	13:00:22	758.97	117.10	12.69	5.97
5/18/2004	13:00:52	765.98	117.10	12.69	5.97
5/18/2004	13:01:22	765.40	116.44	12.67	5.98
5/18/2004	13:01:52	770.40	117.48	12.64	6.01
5/18/2004	13:02:22	775.42	118.76	12.67	5.99
5/18/2004	13:02:52	772.68	117.28	12.69	5.97
5/18/2004	13:03:22	771.00	116.96	12.72	5.95
5/18/2004	13:03:52	766.43	116.94	12.72	5.95
5/18/2004	13:04:22	764.26	117.10	12.73	5.94
5/18/2004	13:04:52	762.19	116.40	12.74	5.93
5/18/2004	13:05:22	761.25	116.76	12.72	5.94
5/18/2004	13:05:52	759.36	116.70	12.74	5.94
5/18/2004	13:06:22	756.35	116.55	12.77	5.91
5/18/2004	13:06:52	750.32	115.34	12.76	5.91
5/18/2004	13:07:22	752.30	116.26	12.75	5.92
5/18/2004	13:07:52	755.78	116.94	12.74	5.92
5/18/2004	13:08:22	757.36	116.72	12.73	5.93
5/18/2004	13:08:52	761.10	116.72	12.72	5.94
5/18/2004	13:09:22	762.05	117.11	12.74	5.93
5/18/2004	13:09:52	760.21	117.94	12.74	5.92

5/18/2004	13:10:22	759.19	116.86	12.74	5.92	
5/18/2004	13:10:52	756.90	116.27	12.74	5.91	
5/18/2004	13:11:22	757.30	116.43	12.72	5.93	
5/18/2004	13:11:52	759.79	117.11	12.72	5.93	
5/18/2004	13:12:22	757.16	116.52	12.72	5.93	
5/18/2004	13:12:52	757.81	116.77	12.72	5.93	
5/18/2004	13:13:22	759.52	117.33	12.71	5.94	
5/18/2004	13:13:52	756.60	118.16	12.73	5.92	
5/18/2004	13:14:22	756.83	117.26	12.75	5.91	
5/18/2004	13:14:52	752.25	116.38	12.76	5.90	
5/18/2004	13:15:22	750.37	118.15	12.73	5.92	
5/18/2004	13:15:52	751.70	118.14	12.70	5.94	
5/18/2004	13:16:22	758.59	118.01	12.68	5.96	
5/18/2004	13:16:52	761.90	117.63	12.69	5.95	
5/18/2004	13:17:22	762.07	117.10	12.74	5.92	
5/18/2004	13:17:52	756.07	116.39	12.75	5.90	
5/18/2004	13:18:22	754.30	116.27	12.74	5.91	
5/18/2004	13:18:52	754.27	116.26	12.76	5.91	
5/18/2004	13:19:22	750.68	115.70	12.78	5.89	
5/18/2004	13:19:52	747.34	115.43	12.77	5.89	
5/18/2004	13:20:22	747.06	116.26	12.76	5.90	
5/18/2004	13:20:52	747.78	115.33	12.73	5.92	
5/18/2004	13:21:22	751.49	115.75	12.72	5.93	
5/18/2004	13:21:52	752.25	115.37	12.81	5.93	
5/18/2004	13:22:22	276.42	103.76	15.96	3.86	
5/18/2004	13:22:52	23.36	30.87	14.36	4.47	
5/18/2004	13:23:22	15.83	1.88	14.22	4.66	
5/18/2004	13:23:52	13.63	-0.29	14.21	4.67	
5/18/2004	13:24:22	11.81	-0.32	14.21	4.67	STARTED CALIBRATING TOO SOON STOP RUN 3
5/18/2004	13:24:52	10.41	-0.15	14.21	4.67	13.92 O2, 4.987 CO2 ZERO CO
5/18/2004	13:25:22	9.65	-0.15	14.21	4.67	
5/18/2004	13:25:52	8.22	1.06	7.73	3.54	
5/18/2004	13:26:22	7.84	30.56	0.29	0.24	
5/18/2004	13:26:52	7.84	56.48	0.01	0.08	
5/18/2004	13:27:22	6.15	58.27	-0.01	0.07	
5/18/2004	13:27:52	5.74	58.55	-0.01	0.07	58.6 CO
5/18/2004	13:28:22	5.78	59.00	-0.01	0.07	ZERO O2, CO2
5/18/2004	13:28:52	4.88	58.87	-0.02	0.07	ZERO NOx
5/18/2004	13:29:22	44.12	58.13	-0.01	0.07	
5/18/2004	13:29:52	676.84	45.55	0.03	0.07	
5/18/2004	13:30:22	851.45	10.51	0.03	0.07	
5/18/2004	13:30:52	855.26	1.91	0.03	0.07	
5/18/2004	13:31:22	855.23	0.86	0.03	0.07	
5/18/2004	13:31:52	855.26	1.45	0.03	0.07	854 NOx
5/18/2004	13:32:22	855.25	1.82	0.02	0.07	
5/18/2004	13:32:52	855.11	0.53	0.11	0.07	
5/18/2004	13:33:22	853.21	0.56	0.09	0.07	
5/18/2004	13:33:52	473.03	1.22	12.67	0.08	
5/18/2004	13:34:22	588.10	20.60	13.38	4.07	
5/18/2004	13:34:52	747.74	96.28	12.67	5.91	
5/18/2004	13:35:22	754.68	117.18	12.64	5.97	RESTART RUN 3
5/18/2004	13:35:52	756.80	118.88	12.64	5.98	
5/18/2004	13:36:22	757.26	118.11	12.65	5.97	
5/18/2004	13:36:52	758.63	117.26	12.64	5.99	
5/18/2004	13:37:22	762.71	118.88	12.66	5.97	
5/18/2004	13:37:52	760.95	118.36	12.68	5.96	
5/18/2004	13:38:22	761.44	118.17	12.65	5.98	
5/18/2004	13:38:52	762.60	118.17	12.65	5.97	
5/18/2004	13:39:22	764.48	118.88	12.67	5.97	
5/18/2004	13:39:52	763.28	118.62	12.70	5.94	
5/18/2004	13:40:22	761.77	116.91	12.72	5.93	END RUN 3
5/18/2004	13:40:52	762.18	116.71	12.71	5.94	
5/18/2004	13:41:22	762.01	117.32	12.71	5.94	
5/18/2004	13:41:52	761.76	118.16	12.69	5.94	
5/18/2004	13:42:22	761.55	117.66	12.71	5.94	
5/18/2004	13:42:52	761.53	117.61	12.73	5.94	
5/18/2004	13:43:22	772.45	118.30	12.52	6.00	
5/18/2004	13:43:52	824.10	117.05	12.33	6.19	
5/18/2004	13:44:22	834.04	109.80	12.36	6.18	

5/18/2004	13:44:52	847.71	107.29	12.24	6.23
5/18/2004	13:45:22	863.72	107.38	12.21	6.28
5/18/2004	13:45:52	868.60	108.22	12.14	6.30
5/18/2004	13:46:22	894.54	108.62	12.03	6.39
5/18/2004	13:46:52	904.49	109.62	12.03	6.40
5/18/2004	13:47:22	909.90	110.82	11.98	6.43
5/18/2004	13:47:52	916.07	112.61	11.96	6.45
5/18/2004	13:48:22	918.96	114.14	11.95	6.46
5/18/2004	13:48:52	919.13	113.08	11.97	6.45
5/18/2004	13:49:22	920.14	111.92	12.00	6.42
5/18/2004	13:49:52	918.55	110.98	12.01	6.41
5/18/2004	13:50:22	918.11	110.98	12.03	6.40
5/18/2004	13:50:52	919.77	110.23	12.01	6.40
5/18/2004	13:51:22	919.98	110.13	11.98	6.43
5/18/2004	13:51:52	921.76	110.55	11.99	6.42
5/18/2004	13:52:22	917.74	111.15	11.98	6.43
5/18/2004	13:52:52	921.58	112.06	11.97	6.44
5/18/2004	13:53:22	927.43	111.84	11.96	6.44
5/18/2004	13:53:52	924.78	111.67	11.95	6.44
5/18/2004	13:54:22	924.72	114.17	11.94	6.45
5/18/2004	13:54:52	928.22	114.34	11.93	6.46
5/18/2004	13:55:22	926.45	112.84	11.94	6.45
5/18/2004	13:55:52	928.86	112.71	11.94	6.45
5/18/2004	13:56:22	931.37	113.03	11.94	6.45
5/18/2004	13:56:52	932.23	113.12	11.95	6.44
5/18/2004	13:57:22	931.06	111.39	11.95	6.44
5/18/2004	13:57:52	929.03	111.19	11.93	6.45
5/18/2004	13:58:22	932.23	112.83	11.95	6.44
5/18/2004	13:58:52	928.52	111.37	11.97	6.43
5/18/2004	13:59:22	925.25	109.49	11.99	6.41
5/18/2004	13:59:52	925.21	111.28	11.97	6.42
5/18/2004	14:00:22	921.32	112.95	11.96	6.42
5/18/2004	14:00:52	918.31	111.94	11.92	6.45
5/18/2004	14:01:22	924.41	113.59	11.93	6.45
5/18/2004	14:01:52	925.67	112.08	11.95	6.43
5/18/2004	14:02:22	925.78	111.51	11.96	6.42
5/18/2004	14:02:52	925.87	111.55	11.92	6.44
5/18/2004	14:03:22	929.39	111.71	11.91	6.46
5/18/2004	14:03:52	928.69	113.03	11.94	6.44
5/18/2004	14:04:22	925.70	112.04	11.95	6.43
5/18/2004	14:04:52	925.49	111.35	11.94	6.43
5/18/2004	14:05:22	929.51	110.84	11.95	6.42
5/18/2004	14:05:52	929.31	111.15	11.93	6.43
5/18/2004	14:06:22	929.82	112.82	11.92	6.44
5/18/2004	14:06:52	930.40	112.62	11.95	6.42
5/18/2004	14:07:22	926.03	110.85	11.98	6.40
5/18/2004	14:07:52	923.36	109.73	11.98	6.40
5/18/2004	14:08:22	922.40	110.53	11.97	6.40
5/18/2004	14:08:52	921.37	110.58	11.94	6.41
5/18/2004	14:09:22	924.32	111.01	11.96	6.40
5/18/2004	14:09:52	924.96	111.82	11.99	6.39
5/18/2004	14:10:22	921.24	110.82	12.01	6.36
5/18/2004	14:10:52	919.44	108.49	12.02	6.36
5/18/2004	14:11:22	918.72	108.38	12.01	6.36
5/18/2004	14:11:52	915.75	109.24	12.00	6.36
5/18/2004	14:12:22	917.67	110.75	11.98	6.37
5/18/2004	14:12:52	917.73	110.11	11.97	6.38
5/18/2004	14:13:22	916.59	110.98	11.93	6.40
5/18/2004	14:13:52	920.29	113.13	11.90	6.42
5/18/2004	14:14:22	925.15	114.18	11.90	6.43
5/18/2004	14:14:52	927.19	114.34	11.91	6.42
5/18/2004	14:15:22	930.38	114.67	11.90	6.42
5/18/2004	14:15:52	931.23	113.46	11.90	6.42
5/18/2004	14:16:22	931.33	113.95	11.90	6.42
5/18/2004	14:16:52	932.19	113.77	11.89	6.42
5/18/2004	14:17:22	932.61	114.49	11.90	6.42
5/18/2004	14:17:52	933.67	114.51	11.92	6.40
5/18/2004	14:18:22	932.52	112.84	11.93	6.39
5/18/2004	14:18:52	929.68	113.63	11.92	6.39

START RUN 4 75% LOAD

AVERAGES:

NOx	CO	O2	CO2
926.88	112.55	11.94	6.38

5/18/2004	14:19:22	930.59	113.47	11.94	6.38
5/18/2004	14:19:52	926.25	112.70	11.93	6.38
5/18/2004	14:20:22	928.16	112.88	11.90	6.40
5/18/2004	14:20:52	931.04	115.03	11.91	6.40
5/18/2004	14:21:22	929.10	114.85	11.90	6.40
5/18/2004	14:21:52	930.78	115.90	11.93	6.39
5/18/2004	14:22:22	927.52	112.89	11.93	6.38
5/18/2004	14:22:52	925.53	111.50	11.92	6.39
5/18/2004	14:23:22	926.10	112.88	11.90	6.39
5/18/2004	14:23:52	932.61	114.47	11.88	6.40
5/18/2004	14:24:22	934.40	114.79	11.86	6.41
5/18/2004	14:24:52	940.07	115.41	11.86	6.42
5/18/2004	14:25:22	943.30	115.21	11.86	6.41
5/18/2004	14:25:52	939.74	114.91	11.88	6.40
5/18/2004	14:26:22	940.66	114.74	11.88	6.39
5/18/2004	14:26:52	941.64	115.24	11.89	6.39
5/18/2004	14:27:22	941.25	113.26	11.92	6.37
5/18/2004	14:27:52	937.38	113.07	11.94	6.35
5/18/2004	14:28:22	933.23	112.49	11.98	6.33
5/18/2004	14:28:52	929.76	110.65	11.97	6.33
5/18/2004	14:29:22	928.26	110.98	11.98	6.32
5/18/2004	14:29:52	927.24	110.97	11.96	6.32
5/18/2004	14:30:22	928.21	111.40	11.94	6.33
5/18/2004	14:30:52	930.19	112.54	11.92	6.34
5/18/2004	14:31:22	930.03	113.06	11.94	6.34
5/18/2004	14:31:52	925.89	111.13	11.94	6.33
5/18/2004	14:32:22	926.34	112.26	11.92	6.34
5/18/2004	14:32:52	925.04	111.37	11.92	6.34
5/18/2004	14:33:22	922.13	110.66	11.91	6.34
5/18/2004	14:33:52	924.27	112.43	11.93	6.34
5/18/2004	14:34:22	923.11	112.66	11.95	6.32
5/18/2004	14:34:52	920.35	111.56	11.98	6.30
5/18/2004	14:35:22	914.32	110.29	11.99	6.29
5/18/2004	14:35:52	916.19	111.16	11.96	6.31
5/18/2004	14:36:22	918.45	113.58	11.94	6.32
5/18/2004	14:36:52	919.22	113.47	11.91	6.33
5/18/2004	14:37:22	927.13	113.81	11.90	6.34
5/18/2004	14:37:52	929.44	114.44	11.88	6.35
5/18/2004	14:38:22	932.48	116.07	11.88	6.36
5/18/2004	14:38:52	935.07	115.41	11.88	6.35
5/18/2004	14:39:22	933.46	114.78	11.90	6.34
5/18/2004	14:39:52	929.76	113.63	11.91	6.33
5/18/2004	14:40:22	929.49	114.34	11.92	6.33
5/18/2004	14:40:52	925.92	112.81	11.94	6.31
5/18/2004	14:41:22	925.18	112.06	11.95	6.31
5/18/2004	14:41:52	923.19	112.04	11.97	6.29
5/18/2004	14:42:22	922.40	112.04	11.94	6.31
5/18/2004	14:42:52	925.14	111.88	11.98	6.29
5/18/2004	14:43:22	921.52	110.28	11.98	6.28
5/18/2004	14:43:52	921.19	110.50	11.95	6.30
5/18/2004	14:44:22	921.97	110.97	11.93	6.31
5/18/2004	14:44:52	922.78	112.68	11.90	6.33
5/18/2004	14:45:22	923.76	114.35	11.91	6.33
5/18/2004	14:45:52	924.39	114.34	11.90	6.33
5/18/2004	14:46:22	926.61	114.34	11.89	6.34
5/18/2004	14:46:52	927.56	114.01	11.90	6.34
5/18/2004	14:47:22	931.14	114.97	11.90	6.34
5/18/2004	14:47:52	929.07	112.84	11.91	6.32
5/18/2004	14:48:22	929.09	113.66	11.91	6.33
5/18/2004	14:48:52	926.53	113.91	11.92	6.32
5/18/2004	14:49:22	924.33	113.28	11.94	6.31
5/18/2004	14:49:52	924.57	113.29	11.95	6.31
5/18/2004	14:50:22	922.59	112.62	11.93	6.30
5/18/2004	14:50:52	924.06	112.23	11.92	6.32
5/18/2004	14:51:22	922.47	111.15	11.91	6.32
5/18/2004	14:51:52	919.77	112.50	11.93	6.32
5/18/2004	14:52:22	513.06	110.61	16.28	4.28
5/18/2004	14:52:52	59.01	55.23	14.50	3.83
5/18/2004	14:53:22	22.85	4.67	14.15	4.56

END RUN 4

5/18/2004	14:53:52	18.01	-0.72	14.13	4.59
5/18/2004	14:54:22	15.52	-0.17	14.13	4.59
5/18/2004	14:54:52	13.63	-0.15	14.13	4.59
5/18/2004	14:55:22	11.79	-0.86	14.13	4.59
5/18/2004	14:55:52	11.66	-0.21	9.63	4.05
5/18/2004	14:56:22	10.62	23.14	0.79	0.51
5/18/2004	14:56:52	9.73	53.85	0.05	0.09
5/18/2004	14:57:22	8.93	57.26	0.00	0.07
5/18/2004	14:57:52	7.82	58.13	0.00	0.07
5/18/2004	14:58:22	7.84	58.11	-0.01	0.07
5/18/2004	14:58:52	7.05	58.12	-0.01	0.07
5/18/2004	14:59:22	5.76	57.63	-0.01	0.07
5/18/2004	14:59:52	295.97	56.38	0.01	0.07
5/18/2004	15:00:22	808.19	25.27	0.03	0.07
5/18/2004	15:00:52	844.39	3.50	0.03	0.07
5/18/2004	15:01:22	845.21	1.15	0.03	0.07
5/18/2004	15:01:52	845.14	0.59	0.03	0.07
5/18/2004	15:02:22	845.17	1.24	0.03	0.07
5/18/2004	15:02:52	845.15	1.25	0.03	0.07
5/18/2004	15:03:22	844.43	1.04	0.27	0.07
5/18/2004	15:03:52	490.77	0.11	12.75	0.08
5/18/2004	15:04:22	97.40	1.51	19.51	0.11
5/18/2004	15:04:52	29.19	2.12	20.74	0.13
5/18/2004	15:05:22	11.67	2.11	20.99	0.13
5/18/2004	15:05:52	7.96	0.08	21.06	0.13
5/18/2004	15:06:22	7.79	0.91	21.07	0.13
5/18/2004	15:06:52	6.65	1.21	21.08	0.14
5/18/2004	15:07:22	5.76	1.20	21.08	0.14
5/18/2004	15:07:52	5.76	0.37	21.09	0.14
5/18/2004	15:08:22	5.78	1.18	21.09	0.14
5/18/2004	15:08:52	5.77	1.32	21.09	0.14
5/18/2004	15:09:22	5.80	2.03	21.09	0.14
5/18/2004	15:09:52	5.82	0.99	21.10	0.14
5/18/2004	15:10:22	5.80	1.01	21.10	0.14
5/18/2004	15:10:52	50.35	1.38	19.99	0.18
5/18/2004	15:11:22	744.49	29.00	12.64	5.03
5/18/2004	15:11:52	906.30	96.15	11.97	6.28
5/18/2004	15:12:22	916.90	109.28	11.96	6.32
5/18/2004	15:12:52	914.82	110.27	11.93	6.33
5/18/2004	15:13:22	921.44	111.16	11.91	6.36
5/18/2004	15:13:52	927.92	111.85	11.92	6.35
5/18/2004	15:14:22	927.44	110.27	11.93	6.34
5/18/2004	15:14:52	927.66	110.51	11.92	6.35
5/18/2004	15:15:22	926.74	111.53	11.92	6.35
5/18/2004	15:15:52	922.78	111.82	11.94	6.34
5/18/2004	15:16:22	922.50	110.96	11.92	6.35
5/18/2004	15:16:52	920.71	110.81	11.90	6.36
5/18/2004	15:17:22	926.09	113.61	11.88	6.38
5/18/2004	15:17:52	923.08	114.59	11.89	6.36
5/18/2004	15:18:22	924.09	113.56	11.89	6.37
5/18/2004	15:18:52	925.58	112.66	11.88	6.37
5/18/2004	15:19:22	930.99	113.77	11.88	6.38
5/18/2004	15:19:52	930.53	114.32	11.90	6.36
5/18/2004	15:20:22	928.40	113.75	11.89	6.37
5/18/2004	15:20:52	926.35	112.28	11.90	6.36
5/18/2004	15:21:22	928.73	113.79	11.86	6.39
5/18/2004	15:21:52	930.27	115.49	11.86	6.39
5/18/2004	15:22:22	930.49	114.77	11.87	6.39
5/18/2004	15:22:52	928.43	114.32	11.87	6.37
5/18/2004	15:23:22	926.35	115.37	11.86	6.39
5/18/2004	15:23:52	921.07	116.85	11.82	6.40
5/18/2004	15:24:22	920.12	118.79	11.79	6.43
5/18/2004	15:24:52	919.28	118.86	11.78	6.44
5/18/2004	15:25:22	918.86	120.06	11.78	6.44
5/18/2004	15:25:52	918.37	120.05	11.78	6.44
5/18/2004	15:26:22	917.69	120.04	11.78	6.43
5/18/2004	15:26:52	918.76	120.06	11.80	6.43
5/18/2004	15:27:22	915.20	119.44	11.82	6.41
5/18/2004	15:27:52	911.56	118.28	11.80	6.41

START RUN 5 75% LOAD

AVERAGES:

NOx	CO	O2	CO2
917.94	116.44	11.85	6.37

5/18/2004	15:28:22	913.81	120.44	11.79	6.42
5/18/2004	15:28:52	915.91	119.33	11.78	6.43
5/18/2004	15:29:22	917.10	118.89	11.80	6.42
5/18/2004	15:29:52	916.02	118.56	11.81	6.41
5/18/2004	15:30:22	916.59	118.53	11.82	6.41
5/18/2004	15:30:52	914.76	116.76	11.84	6.39
5/18/2004	15:31:22	911.64	115.20	11.84	6.38
5/18/2004	15:31:52	911.04	115.82	11.84	6.39
5/18/2004	15:32:22	910.86	116.39	11.87	6.36
5/18/2004	15:32:52	908.58	114.15	11.86	6.37
5/18/2004	15:33:22	910.22	115.19	11.87	6.37
5/18/2004	15:33:52	905.50	114.43	11.87	6.35
5/18/2004	15:34:22	906.15	115.60	11.86	6.36
5/18/2004	15:34:52	908.14	116.27	11.84	6.37
5/18/2004	15:35:22	910.46	116.70	11.85	6.38
5/18/2004	15:35:52	907.01	115.66	11.89	6.35
5/18/2004	15:36:22	901.90	114.14	11.90	6.33
5/18/2004	15:36:52	905.24	112.90	11.88	6.34
5/18/2004	15:37:22	906.40	113.90	11.89	6.34
5/18/2004	15:37:52	905.09	114.75	11.88	6.34
5/18/2004	15:38:22	906.40	116.24	11.85	6.36
5/18/2004	15:38:52	912.14	116.10	11.83	6.37
5/18/2004	15:39:22	916.62	116.06	11.85	6.38
5/18/2004	15:39:52	914.30	116.09	11.87	6.35
5/18/2004	15:40:22	912.65	115.19	11.86	6.35
5/18/2004	15:40:52	915.11	115.55	11.87	6.36
5/18/2004	15:41:22	915.43	115.19	11.88	6.34
5/18/2004	15:41:52	913.05	114.45	11.88	6.34
5/18/2004	15:42:22	914.87	115.76	11.86	6.36
5/18/2004	15:42:52	917.12	117.11	11.88	6.35
5/18/2004	15:43:22	912.95	114.71	11.90	6.33
5/18/2004	15:43:52	911.99	114.34	11.90	6.33
5/18/2004	15:44:22	908.32	113.48	11.93	6.31
5/18/2004	15:44:52	904.96	112.50	11.93	6.31
5/18/2004	15:45:22	904.72	110.26	11.94	6.30
5/18/2004	15:45:52	905.73	111.79	11.89	6.32
5/18/2004	15:46:22	907.82	115.99	11.91	6.32
5/18/2004	15:46:52	909.54	115.90	11.88	6.33
5/18/2004	15:47:22	909.77	115.33	11.92	6.32
5/18/2004	15:47:52	906.54	112.40	11.91	6.32
5/18/2004	15:48:22	910.24	113.42	11.88	6.33
5/18/2004	15:48:52	919.95	115.58	11.89	6.34
5/18/2004	15:49:22	918.81	115.04	11.89	6.33
5/18/2004	15:49:52	917.72	116.23	11.88	6.34
5/18/2004	15:50:22	916.13	116.66	11.87	6.34
5/18/2004	15:50:52	916.42	116.40	11.87	6.34
5/18/2004	15:51:22	917.58	116.72	11.84	6.36
5/18/2004	15:51:52	919.44	118.46	11.85	6.36
5/18/2004	15:52:22	919.53	117.77	11.87	6.34
5/18/2004	15:52:52	916.11	117.67	11.87	6.34
5/18/2004	15:53:22	915.22	117.27	11.85	6.35
5/18/2004	15:53:52	919.44	118.36	11.84	6.36
5/18/2004	15:54:22	919.54	119.92	11.83	6.37
5/18/2004	15:54:52	922.26	119.85	11.83	6.38
5/18/2004	15:55:22	923.00	118.99	11.81	6.39
5/18/2004	15:55:52	923.84	119.01	11.83	6.38
5/18/2004	15:56:22	922.36	118.76	11.83	6.37
5/18/2004	15:56:52	926.28	120.20	11.80	6.39
5/18/2004	15:57:22	930.42	120.53	11.82	6.39
5/18/2004	15:57:52	928.93	119.19	11.84	6.38
5/18/2004	15:58:22	922.58	117.61	11.88	6.35
5/18/2004	15:58:52	918.15	115.34	11.86	6.35
5/18/2004	15:59:22	917.84	116.06	11.86	6.36
5/18/2004	15:59:52	916.14	116.27	11.88	6.35
5/18/2004	16:00:22	913.30	115.78	11.89	6.34
5/18/2004	16:00:52	911.37	115.77	11.86	6.35
5/18/2004	16:01:22	911.74	117.65	11.84	6.38
5/18/2004	16:01:52	915.33	118.75	11.84	6.38
5/18/2004	16:02:22	915.29	118.37	11.85	6.37

5/18/2004	16:02:52	915.22	118.75	11.84	6.38
5/18/2004	16:03:22	920.71	119.44	11.80	6.40
5/18/2004	16:03:52	926.82	119.59	11.82	6.40
5/18/2004	16:04:22	923.69	117.92	11.86	6.38
5/18/2004	16:04:52	919.91	117.11	11.85	6.37
5/18/2004	16:05:22	922.91	117.09	11.84	6.39
5/18/2004	16:05:52	919.14	116.41	11.87	6.36
5/18/2004	16:06:22	917.51	115.41	11.86	6.37
5/18/2004	16:06:52	917.55	115.21	11.87	6.36
5/18/2004	16:07:22	915.62	114.48	11.85	6.37
5/18/2004	16:07:52	915.68	115.69	11.83	6.38
5/18/2004	16:08:22	916.45	117.79	11.83	6.39
5/18/2004	16:08:52	914.34	117.56	11.85	6.37
5/18/2004	16:09:22	915.40	116.79	11.84	6.37
5/18/2004	16:09:52	921.35	116.24	11.83	6.39
5/18/2004	16:10:22	922.46	117.52	11.83	6.39
5/18/2004	16:10:52	925.65	117.96	11.85	6.37
5/18/2004	16:11:22	924.46	117.09	11.84	6.38
5/18/2004	16:11:52	927.06	117.09	11.83	6.38
5/18/2004	16:12:22	929.62	117.30	11.84	6.38
5/18/2004	16:12:52	929.98	117.54	11.83	6.38
5/18/2004	16:13:22	929.03	117.50	11.81	6.39
5/18/2004	16:13:52	930.45	117.63	11.82	6.39
5/18/2004	16:14:22	930.04	116.57	11.86	6.37
5/18/2004	16:14:52	926.72	115.19	11.86	6.35
5/18/2004	16:15:22	925.61	116.06	11.84	6.37
5/18/2004	16:15:52	926.16	116.26	11.82	6.38
5/18/2004	16:16:22	927.96	116.70	11.81	6.40
5/18/2004	16:16:52	927.24	117.11	11.83	6.39
5/18/2004	16:17:22	927.17	118.15	11.80	6.40
5/18/2004	16:17:52	927.90	118.33	11.82	6.39
5/18/2004	16:18:22	929.49	117.32	11.82	6.39
5/18/2004	16:18:52	930.41	118.15	11.81	6.40
5/18/2004	16:19:22	694.12	116.78	15.33	6.11
5/18/2004	16:19:52	166.86	76.09	18.72	1.71
5/18/2004	16:20:22	40.63	21.05	14.12	2.06
5/18/2004	16:20:52	23.55	5.01	14.16	4.37
5/18/2004	16:21:22	18.78	-0.18	14.14	4.56
5/18/2004	16:21:52	16.54	-0.15	14.13	4.59
5/18/2004	16:22:22	14.90	-1.50	14.13	4.59
5/18/2004	16:22:52	13.63	-1.38	14.13	4.59
5/18/2004	16:23:22	11.64	-0.70	14.13	4.69
5/18/2004	16:23:52	11.71	1.44	8.26	3.84
5/18/2004	16:24:22	11.00	28.33	0.72	0.50
5/18/2004	16:24:52	9.72	53.56	0.08	0.10
5/18/2004	16:25:22	9.75	57.68	0.02	0.07
5/18/2004	16:25:52	8.06	58.16	0.00	0.07
5/18/2004	16:26:22	7.82	67.95	0.00	0.07
5/18/2004	16:26:52	7.86	57.54	-0.01	0.07
5/18/2004	16:27:22	6.06	58.12	-0.01	0.07
5/18/2004	16:27:52	175.86	57.49	0.01	0.07
5/18/2004	16:28:22	752.32	34.17	0.04	0.07
5/18/2004	16:28:52	835.90	4.85	0.04	0.07
5/18/2004	16:29:22	842.11	1.25	0.03	0.07
5/18/2004	16:29:52	843.17	0.98	0.03	0.07
5/18/2004	16:30:22	842.47	-0.95	0.03	0.07
5/18/2004	16:30:52	842.24	-0.04	0.03	0.07
5/18/2004	16:31:22	841.29	1.25	0.03	0.07
5/18/2004	16:31:52	785.54	1.60	4.25	0.17
5/18/2004	16:32:22	850.27	33.71	11.27	4.85
5/18/2004	16:32:52	892.69	102.65	11.76	6.29
5/18/2004	16:33:22	899.06	117.36	11.76	6.41
5/18/2004	16:33:52	903.32	118.89	11.78	6.42
5/18/2004	16:34:22	905.73	118.62	11.78	6.42
5/18/2004	16:34:52	905.19	119.01	11.79	6.42
5/18/2004	16:35:22	905.28	119.51	11.77	6.42
5/18/2004	16:35:52	907.52	121.08	11.77	6.44
5/18/2004	16:36:22	906.41	119.52	11.82	6.42
5/18/2004	16:36:52	900.59	118.14	11.84	6.39

5/18/2004	16:37:22	895.52	116.81	11.84	6.39
5/18/2004	16:37:52	895.45	116.40	11.84	6.40
5/18/2004	16:38:22	895.52	116.67	11.84	6.40
5/18/2004	16:38:52	895.56	116.23	11.83	6.40
5/18/2004	16:39:22	898.53	115.37	11.83	6.40
5/18/2004	16:39:52	898.48	115.72	11.82	6.41
5/18/2004	16:40:22	900.70	116.26	11.81	6.42
5/18/2004	16:40:52	900.09	116.84	11.83	6.40
5/18/2004	16:41:22	896.62	116.26	11.84	6.40
5/18/2004	16:41:52	895.47	116.52	11.84	6.40
5/18/2004	16:42:22	895.10	116.13	11.82	6.41
5/18/2004	16:42:52	901.44	116.08	11.81	6.42
5/18/2004	16:43:22	903.63	115.35	11.83	6.41
5/18/2004	16:43:52	901.99	115.21	11.84	6.40
5/18/2004	16:44:22	900.56	114.95	11.84	6.40
5/18/2004	16:44:52	901.23	115.19	11.85	6.39
5/18/2004	16:45:22	900.91	113.36	11.87	6.38
5/18/2004	16:45:52	899.80	112.64	11.85	6.38
5/18/2004	16:46:22	905.65	114.16	11.81	6.41
5/18/2004	16:46:52	911.13	115.51	11.85	6.40
5/18/2004	16:47:22	905.33	115.01	11.88	6.37
5/18/2004	16:47:52	903.91	113.84	11.90	6.36
5/18/2004	16:48:22	899.60	111.49	11.89	6.35
5/18/2004	16:48:52	901.31	110.77	11.85	6.37
5/18/2004	16:49:22	904.05	113.56	11.84	6.38
5/18/2004	16:49:52	907.87	115.09	11.83	6.39
5/18/2004	16:50:22	909.68	115.76	11.81	6.40
5/18/2004	16:50:52	914.84	115.74	11.82	6.40
5/18/2004	16:51:22	914.84	115.51	11.84	6.39
5/18/2004	16:51:52	912.89	115.21	11.84	6.38
5/18/2004	16:52:22	912.63	116.05	11.84	6.38
5/18/2004	16:52:52	912.10	115.63	11.86	6.37
5/18/2004	16:53:22	908.52	113.44	11.88	6.35
5/18/2004	16:53:52	903.62	113.27	11.90	6.34
5/18/2004	16:54:22	902.57	113.81	11.90	6.33
5/18/2004	16:54:52	901.18	110.89	11.90	6.33
5/18/2004	16:55:22	900.60	112.33	11.87	6.34
5/18/2004	16:55:52	902.44	113.91	11.85	6.36
5/18/2004	16:56:22	904.38	114.92	11.87	6.35
5/18/2004	16:56:52	905.45	113.81	11.85	6.36
5/18/2004	16:57:22	908.29	113.75	11.83	6.37
5/18/2004	16:57:52	911.07	115.03	11.82	6.38
5/18/2004	16:58:22	915.84	115.73	11.81	6.39
5/18/2004	16:58:52	917.68	115.78	11.82	6.38
5/18/2004	16:59:22	918.61	115.37	11.84	6.38
5/18/2004	16:59:52	916.23	114.97	11.87	6.35
5/18/2004	17:00:22	913.27	114.58	11.86	6.34
5/18/2004	17:00:52	911.00	113.78	11.87	6.34
5/18/2004	17:01:22	905.90	112.87	11.87	6.33
5/18/2004	17:01:52	902.18	114.15	11.84	6.34
5/18/2004	17:02:22	904.07	115.33	11.79	6.38
5/18/2004	17:02:52	907.81	118.61	11.76	6.41
5/18/2004	17:03:22	908.77	119.07	11.77	6.40
5/18/2004	17:03:52	910.22	118.14	11.77	6.40
5/18/2004	17:04:22	909.77	118.80	11.77	6.40
5/18/2004	17:04:52	907.22	118.64	11.81	6.38
5/18/2004	17:05:22	903.80	115.78	11.82	6.36
5/18/2004	17:05:52	903.11	115.18	11.81	6.37
5/18/2004	17:06:22	902.27	114.50	11.82	6.36
5/18/2004	17:06:52	901.28	115.08	11.83	6.36
5/18/2004	17:07:22	901.91	114.99	11.81	6.36
5/18/2004	17:07:52	906.51	114.52	11.80	6.38
5/18/2004	17:08:22	908.42	116.69	11.77	6.39
5/18/2004	17:08:52	911.95	118.85	11.78	6.40
5/18/2004	17:09:22	911.55	119.15	11.81	6.38
5/18/2004	17:09:52	905.81	115.32	11.82	6.36
5/18/2004	17:10:22	907.14	114.99	11.80	6.38
5/18/2004	17:10:52	909.83	116.75	11.81	6.38
5/18/2004	17:11:22	909.95	117.00	11.80	6.38

START RUN 6 75% LOAD

AVERAGES:

NOx	CO	O2	CO2
909.94	115.80	11.82	6.38

5/18/2004	17:11:52	909.57	116.62	11.81	6.36
5/18/2004	17:12:22	909.23	116.05	11.83	6.36
5/18/2004	17:12:52	910.01	115.36	11.83	6.36
5/18/2004	17:13:22	909.50	115.81	11.84	6.35
5/18/2004	17:13:52	908.21	114.73	11.85	6.34
5/18/2004	17:14:22	904.46	113.27	11.83	6.35
5/18/2004	17:14:52	905.53	114.66	11.84	6.35
5/18/2004	17:15:22	908.07	114.46	11.86	6.34
5/18/2004	17:15:52	905.79	112.86	11.86	6.34
5/18/2004	17:16:22	902.96	113.11	11.84	6.34
5/18/2004	17:16:52	901.59	113.10	11.83	6.35
5/18/2004	17:17:22	904.75	115.71	11.80	6.37
5/18/2004	17:17:52	905.50	117.80	11.79	6.38
5/18/2004	17:18:22	909.71	117.10	11.81	6.38
5/18/2004	17:18:52	907.12	116.41	11.83	6.36
5/18/2004	17:19:22	904.85	115.15	11.85	6.35
5/18/2004	17:19:52	902.32	114.32	11.84	6.35
5/18/2004	17:20:22	902.10	114.51	11.83	6.35
5/18/2004	17:20:52	906.46	116.30	11.78	6.38
5/18/2004	17:21:22	914.78	118.02	11.76	6.40
5/18/2004	17:21:52	919.58	118.15	11.73	6.42
5/18/2004	17:22:22	926.46	118.41	11.74	6.43
5/18/2004	17:22:52	924.35	118.62	11.76	6.41
5/18/2004	17:23:22	925.14	117.97	11.75	6.40
5/18/2004	17:23:52	926.43	118.77	11.77	6.41
5/18/2004	17:24:22	923.44	116.81	11.79	6.39
5/18/2004	17:24:52	921.75	116.88	11.78	6.39
5/18/2004	17:25:22	921.31	117.65	11.78	6.39
5/18/2004	17:25:52	923.62	117.06	11.75	6.41
5/18/2004	17:26:22	928.17	119.88	11.75	6.42
5/18/2004	17:26:52	927.34	119.15	11.78	6.40
5/18/2004	17:27:22	925.20	116.97	11.78	6.40
5/18/2004	17:27:52	924.78	117.15	11.79	6.40
5/18/2004	17:28:22	922.65	117.96	11.83	6.38
5/18/2004	17:28:52	918.26	115.65	11.84	6.35
5/18/2004	17:29:22	916.68	114.50	11.80	6.38
5/18/2004	17:29:52	921.36	115.73	11.78	6.40
5/18/2004	17:30:22	925.96	117.13	11.78	6.41
5/18/2004	17:30:52	922.85	118.59	11.81	6.38
5/18/2004	17:31:22	918.15	114.50	11.82	6.38
5/18/2004	17:31:52	919.45	114.32	11.81	6.39
5/18/2004	17:32:22	916.84	115.28	11.79	6.39
5/18/2004	17:32:52	916.77	117.44	11.79	6.39
5/18/2004	17:33:22	918.26	117.10	11.78	6.39
5/18/2004	17:33:52	920.46	116.10	11.76	6.42
5/18/2004	17:34:22	919.09	117.93	11.78	6.40
5/18/2004	17:34:52	919.20	117.64	11.78	6.40
5/18/2004	17:35:22	921.22	117.74	11.76	6.41
5/18/2004	17:35:52	922.90	117.61	11.74	6.42
5/18/2004	17:36:22	923.82	118.54	11.75	6.42
5/18/2004	17:36:52	925.64	120.08	11.73	6.43
5/18/2004	17:37:22	928.43	121.54	11.75	6.43
5/18/2004	17:37:52	928.78	119.27	11.75	6.42
5/18/2004	17:38:22	928.00	118.01	11.75	6.41
5/18/2004	17:38:52	927.73	118.14	11.74	6.43
5/18/2004	17:39:22	926.78	120.48	11.76	6.42
5/18/2004	17:39:52	925.50	120.05	11.75	6.42
5/18/2004	17:40:22	691.92	117.41	13.66	5.85
5/18/2004	17:40:52	121.27	70.61	14.14	4.48
5/18/2004	17:41:22	36.45	10.60	14.08	4.60
5/18/2004	17:41:52	23.37	0.48	14.08	4.60
5/18/2004	17:42:22	19.58	-1.67	14.08	4.60
5/18/2004	17:42:52	17.31	-1.62	14.08	4.60
5/18/2004	17:43:22	15.86	-0.35	10.23	4.36
5/18/2004	17:43:52	15.57	20.18	1.31	0.97
5/18/2004	17:44:22	13.73	50.18	0.15	0.13
5/18/2004	17:44:52	12.20	56.47	0.03	0.08
5/18/2004	17:45:22	11.72	57.67	0.01	0.07
5/18/2004	17:45:52	9.78	58.15	0.00	0.07

5/18/2004	17:46:22	9.76	57.59	0.00	0.07
5/18/2004	17:46:52	9.23	57.21	-0.01	0.07
5/18/2004	17:47:22	7.82	58.12	-0.01	0.07
5/18/2004	17:47:52	138.43	57.71	0.01	0.07
5/18/2004	17:48:22	715.61	34.78	0.03	0.07
5/18/2004	17:48:52	830.70	6.00	0.03	0.07
5/18/2004	17:49:22	838.43	1.03	0.03	0.07
5/18/2004	17:49:52	839.16	0.62	0.03	0.07
5/18/2004	17:50:22	839.14	0.15	0.03	0.07
5/18/2004	17:50:52	838.30	-0.13	0.03	0.07
5/18/2004	17:51:22	837.91	0.10	0.04	0.07
5/18/2004	17:51:52	667.60	0.80	7.55	0.07
5/18/2004	17:52:22	188.84	1.20	18.13	0.09
5/18/2004	17:52:52	517.10	15.14	14.48	2.78
5/18/2004	17:53:22	361.17	157.49	17.08	3.42
5/18/2004	17:53:52	229.54	475.93	17.71	2.24
5/18/2004	17:54:22	225.15	586.59	17.73	2.20
5/18/2004	17:54:52	229.17	607.38	17.72	2.21
5/18/2004	17:55:22	232.34	614.97	17.71	2.22
5/18/2004	17:55:52	234.27	623.27	17.70	2.22
5/18/2004	17:56:22	236.42	630.58	17.69	2.23
5/18/2004	17:56:52	236.42	635.05	17.68	2.24
5/18/2004	17:57:22	236.49	639.73	17.68	2.25
5/18/2004	17:57:52	236.50	643.81	17.68	2.25
5/18/2004	17:58:22	236.48	649.03	17.68	2.26
5/18/2004	17:58:52	236.46	651.45	17.68	2.26
5/18/2004	17:59:22	230.91	652.17	17.77	2.23
5/18/2004	17:59:52	222.73	666.62	17.81	2.16
5/18/2004	18:00:22	222.27	680.00	17.82	2.15
5/18/2004	18:00:52	222.28	681.44	17.81	2.16
5/18/2004	18:01:22	222.30	676.28	17.81	2.16
5/18/2004	18:01:52	224.19	678.12	17.81	2.17
5/18/2004	18:02:22	223.66	680.63	17.81	2.17
5/18/2004	18:02:52	222.27	681.75	17.82	2.17
5/18/2004	18:03:22	223.77	679.99	17.82	2.17
5/18/2004	18:03:52	222.14	678.03	17.83	2.17
5/18/2004	18:04:22	135.08	640.75	19.84	1.48
5/18/2004	18:04:52	29.18	267.17	21.06	0.19
5/18/2004	18:05:22	15.73	42.21	21.16	0.09
5/18/2004	18:05:52	13.28	21.62	21.18	0.09
5/18/2004	18:06:22	16.57	18.53	20.97	0.10
5/18/2004	18:06:52	18.63	18.59	21.02	0.21
5/18/2004	18:07:22	11.53	6.38	21.13	0.11
5/18/2004	18:07:52	8.36	1.60	21.19	0.10
5/18/2004	18:08:22	2.34	1.39	21.09	0.09
5/18/2004	18:08:52	0.14	1.90	20.97	0.08
5/18/2004	18:09:22	0.16	7.25	20.93	0.08
5/18/2004	18:09:52	0.00	12.74	20.92	0.08

ENGINE SHUT DOWN

AVERAGES:

NOx	CO	O2	CO2
228.85	643.47	17.75	2.20

Date Time el 2 CLD 7Cannel 5 48H 4 TELED\inel 3 880A CO2

Date	Time	PPMd	PPMd	%d	%d
		Average	Average	Average	Average
5/19/2004	7:08:15	0.02	1.23	21.10	0.10
5/19/2004	7:08:45	0.00	0.78	21.10	0.10
5/19/2004	7:09:15	0.00	1.72	21.10	0.10
5/19/2004	7:09:45	0.00	1.02	21.08	0.10
5/19/2004	7:10:15	0.05	1.72	21.07	0.11
5/19/2004	7:10:45	0.00	0.69	21.08	0.11
5/19/2004	7:11:15	0.00	1.72	21.07	0.11
5/19/2004	7:11:45	0.00	1.08	21.08	0.11
5/19/2004	7:12:15	0.00	1.30	21.07	0.11
5/19/2004	7:12:45	0.00	1.05	21.06	0.11
5/19/2004	7:13:15	0.00	1.30	21.03	0.11
5/19/2004	7:13:45	0.00	1.49	21.01	0.11
5/19/2004	7:14:15	0.00	1.30	21.00	0.11
5/19/2004	7:14:45	0.00	0.65	20.99	0.11

5/19/2004	7:15:15	214.55	2.16	16.81	0.10
5/19/2004	7:15:45	1252.69	0.91	0.52	0.07
5/19/2004	7:16:15	1308.59	1.58	0.06	0.07
5/19/2004	7:16:45	1260.87	0.43	0.04	0.07
5/19/2004	7:17:15	1246.36	1.08	0.04	0.07
5/19/2004	7:17:45	1246.29	0.40	0.03	0.07
5/19/2004	7:18:15	1246.31	0.86	0.03	0.07
5/19/2004	7:18:45	1246.31	0.81	0.03	0.07
5/19/2004	7:19:15	1246.33	0.83	0.03	0.07
5/19/2004	7:19:45	1020.47	1.26	0.02	0.07
5/19/2004	7:20:15	469.91	0.06	-0.01	0.07
5/19/2004	7:20:45	457.32	1.54	-0.01	0.07
5/19/2004	7:21:15	457.33	-0.08	-0.02	0.07
5/19/2004	7:21:45	457.36	1.70	-0.02	0.07
5/19/2004	7:22:15	457.27	-0.32	-0.02	0.07
5/19/2004	7:22:45	622.82	1.28	-0.01	0.07
5/19/2004	7:23:15	855.04	-0.14	0.00	0.07
5/19/2004	7:23:45	861.89	1.47	0.00	0.07
5/19/2004	7:24:15	862.51	0.36	0.00	0.07
5/19/2004	7:24:45	861.89	0.73	0.00	0.07
5/19/2004	7:25:15	861.91	0.35	-0.01	0.07
5/19/2004	7:25:45	682.14	1.72	0.04	0.07
5/19/2004	7:26:15	14.68	155.08	-0.04	0.07
5/19/2004	7:26:45	0.00	339.14	-0.05	0.07
5/19/2004	7:27:15	0.00	352.66	-0.05	0.07
5/19/2004	7:27:45	0.00	355.09	-0.05	0.07
5/19/2004	7:28:15	0.00	356.88	-0.05	0.07
5/19/2004	7:28:45	0.00	355.52	-0.05	0.07
5/19/2004	7:29:15	0.00	357.06	-0.05	0.07
5/19/2004	7:29:45	0.00	337.70	0.22	0.19
5/19/2004	7:30:15	0.00	149.95	-0.05	0.08
5/19/2004	7:30:45	0.00	58.78	-0.05	0.08
5/19/2004	7:31:15	0.00	57.67	-0.05	0.08
5/19/2004	7:31:45	0.00	56.92	-0.05	0.08
5/19/2004	7:32:15	0.00	58.29	-0.05	0.08
5/19/2004	7:32:45	0.00	56.18	1.66	2.69
5/19/2004	7:33:15	0.00	33.26	5.86	14.35
5/19/2004	7:33:45	0.00	0.60	5.99	14.74
5/19/2004	7:34:15	0.00	-2.12	5.99	14.74
5/19/2004	7:34:45	0.04	-2.31	5.99	14.73
5/19/2004	7:35:15	0.00	-2.16	5.99	14.72
5/19/2004	7:35:45	0.00	-2.34	6.00	14.66
5/19/2004	7:36:15	0.00	-2.53	6.00	14.88
5/19/2004	7:36:45	0.00	-2.09	6.00	14.98
5/19/2004	7:37:15	0.00	-2.72	6.00	14.96
5/19/2004	7:37:45	0.00	-1.95	6.00	14.95
5/19/2004	7:38:15	0.00	-2.51	6.00	14.95
5/19/2004	7:38:45	0.00	-1.57	8.34	12.73
5/19/2004	7:39:15	0.00	-2.70	13.83	5.13
5/19/2004	7:39:45	0.00	-0.91	13.98	4.91
5/19/2004	7:40:15	0.00	-1.67	13.98	4.90
5/19/2004	7:40:45	0.00	-0.85	13.99	4.89
5/19/2004	7:41:15	0.00	-1.81	13.99	4.89
5/19/2004	7:41:45	0.00	-1.44	14.02	4.89
5/19/2004	7:42:15	81.11	-1.04	13.71	3.41
5/19/2004	7:42:45	756.91	-1.07	0.82	0.37
5/19/2004	7:43:15	852.82	0.44	0.04	0.08
5/19/2004	7:43:45	853.85	-0.46	0.01	0.07
5/19/2004	7:44:15	853.85	0.42	0.00	0.07
5/19/2004	7:44:45	853.82	-0.57	0.00	0.07
5/19/2004	7:45:15	853.87	0.46	0.00	0.07
5/19/2004	7:45:45	331.10	5.32	0.07	0.11
5/19/2004	7:46:15	3.91	42.66	-0.04	0.08
5/19/2004	7:46:45	0.00	55.52	-0.05	0.08
5/19/2004	7:47:15	0.00	57.29	-0.05	0.08
5/19/2004	7:47:45	0.00	55.66	-0.05	0.08
5/19/2004	7:48:15	0.00	56.68	-0.05	0.08
5/19/2004	7:48:45	126.17	54.98	4.62	0.08
5/19/2004	7:49:15	823.09	26.28	3.88	0.08

5/19/2004	7:49:45	1212.84	2.35	0.08	0.07
5/19/2004	7:50:15	1225.56	-0.90	0.02	0.07
5/19/2004	7:50:45	1226.11	-0.27	0.01	0.07
5/19/2004	7:51:15	1226.06	-1.25	0.01	0.06
5/19/2004	7:51:45	1226.09	-0.27	0.01	0.07
5/19/2004	7:52:15	1226.06	-0.62	0.01	0.06
5/19/2004	7:52:45	1057.99	0.16	3.68	0.61
5/19/2004	7:53:15	77.88	-1.75	13.53	4.45
5/19/2004	7:53:45	3.48	-1.44	14.05	4.77
5/19/2004	7:54:15	-0.03	-1.72	14.08	4.77
5/19/2004	7:54:45	-0.08	-1.71	14.09	4.78
5/19/2004	7:55:15	-0.16	-1.11	14.11	4.79
5/19/2004	7:55:45	-0.12	-2.08	14.11	4.78
5/19/2004	7:56:15	0.64	-1.19	15.66	4.50
5/19/2004	7:56:45	3.63	-1.97	20.23	1.02
5/19/2004	7:57:15	1.77	0.41	21.12	0.14
5/19/2004	7:57:45	-0.07	-1.32	21.24	0.09
5/19/2004	7:58:15	0.00	0.17	21.25	0.09
5/19/2004	7:58:45	0.00	-0.38	21.25	0.08
5/19/2004	7:59:15	0.15	0.23	21.25	0.08
5/19/2004	7:59:45	0.00	-0.35	21.24	0.08
5/19/2004	8:00:15	216.80	67.72	16.92	2.37
5/19/2004	8:00:45	757.48	819.29	10.81	7.41
5/19/2004	8:01:15	688.92	341.92	11.34	6.98
5/19/2004	8:01:45	700.54	161.54	11.48	6.85
5/19/2004	8:02:15	723.99	141.53	11.52	6.80
5/19/2004	8:02:45	746.52	132.28	11.55	6.76
5/19/2004	8:03:15	745.90	126.40	11.54	6.71
5/19/2004	8:03:45	753.06	125.07	11.53	6.69
5/19/2004	8:04:15	768.26	122.85	11.53	6.67
5/19/2004	8:04:45	779.78	120.66	11.53	6.66
5/19/2004	8:05:15	792.24	117.46	11.53	6.66
5/19/2004	8:05:45	801.15	117.70	11.50	6.67
5/19/2004	8:06:15	808.10	118.11	11.50	6.67
5/19/2004	8:06:45	812.83	118.23	11.48	6.68
5/19/2004	8:07:15	821.44	116.65	11.46	6.70
5/19/2004	8:07:45	826.06	118.45	11.45	6.71
5/19/2004	8:08:15	826.86	118.81	11.45	6.70
5/19/2004	8:08:45	828.72	120.26	11.45	6.71
5/19/2004	8:09:15	828.49	118.70	11.43	6.72
5/19/2004	8:09:45	829.77	120.71	11.41	6.73
5/19/2004	8:10:15	832.45	122.15	11.42	6.73
5/19/2004	8:10:45	834.74	123.55	11.42	6.73
5/19/2004	8:11:15	835.02	122.56	11.41	6.74
5/19/2004	8:11:45	835.48	122.13	11.42	6.74
5/19/2004	8:12:15	834.97	122.62	11.43	6.73
5/19/2004	8:12:45	834.52	120.90	11.41	6.75
5/19/2004	8:13:15	836.93	122.41	11.39	6.77
5/19/2004	8:13:45	838.54	123.53	11.40	6.77
5/19/2004	8:14:15	843.22	125.18	11.39	6.77
5/19/2004	8:14:45	843.80	124.16	11.40	6.77
5/19/2004	8:15:15	844.13	123.85	11.40	6.77
5/19/2004	8:15:45	846.49	122.78	11.41	6.77
5/19/2004	8:16:15	847.78	124.36	11.39	6.79
5/19/2004	8:16:45	850.22	124.96	11.39	6.79
5/19/2004	8:17:15	851.70	127.64	11.39	6.79
5/19/2004	8:17:45	719.23	128.34	13.72	5.78
5/19/2004	8:18:15	248.03	295.14	17.57	2.41
5/19/2004	8:18:45	219.98	570.99	17.72	2.23
5/19/2004	8:19:15	225.51	634.21	17.71	2.24

START UP
AVERAGES:

NOx	CO	O2	CO2
804.76	131.11	11.45	6.74

AIR CONSULTING & ENGINEERING, INC
 30 SECOND DATA LOGGER AVERAGES

DISNEY WORLDWIDE SERVICES, INC.
 DIESEL NO. 3

Date	Time	Channel 2	Channel 5	Channel 4	Channel 3	
		CLD 70S NOx PPMd Average	48H CO PPMd Average	TELEDYN E O2 %d Average	880A CO2 %d Average	
5/20/2004	7:16:44	0.00	0.74	21.05	0.09	
5/20/2004	7:17:14	0.00	1.39	21.08	0.10	
5/20/2004	7:17:44	0.00	0.78	21.13	0.11	
5/20/2004	7:18:14	0.00	1.74	21.14	0.11	
5/20/2004	7:18:44	0.00	0.92	21.16	0.11	
5/20/2004	7:19:14	0.00	1.73	21.16	0.11	
5/20/2004	7:19:44	0.00	0.80	21.16	0.11	LINEARITY
5/20/2004	7:20:14	0.05	1.74	21.17	0.11	
5/20/2004	7:20:44	0.03	0.64	21.17	0.11	20.9 O2
5/20/2004	7:21:14	0.00	1.62	21.16	0.11	
5/20/2004	7:21:44	0.02	0.61	21.13	0.10	
5/20/2004	7:22:14	690.16	1.29	7.00	0.08	
5/20/2004	7:22:44	1253.14	0.52	0.12	0.07	
5/20/2004	7:23:14	1258.45	1.44	0.06	0.07	
5/20/2004	7:23:44	1245.81	-0.19	0.05	0.07	
5/20/2004	7:24:14	1246.21	1.32	0.05	0.07	
5/20/2004	7:24:44	1247.86	0.54	0.04	0.07	
5/20/2004	7:25:14	1248.16	1.23	0.04	0.07	
5/20/2004	7:25:44	1248.22	0.68	0.04	0.07	1242 NOx
5/20/2004	7:26:14	1248.17	0.77	0.04	0.07	
5/20/2004	7:26:44	1248.21	0.75	0.04	0.07	
5/20/2004	7:27:14	1248.22	0.62	0.03	0.07	
5/20/2004	7:27:44	986.03	1.02	0.06	0.07	
5/20/2004	7:28:14	866.78	0.13	0.02	0.07	
5/20/2004	7:28:44	866.16	0.93	0.02	0.07	
5/20/2004	7:29:14	866.10	-0.32	0.02	0.07	854 NOx
5/20/2004	7:29:44	866.16	1.64	0.01	0.07	
5/20/2004	7:30:14	866.11	0.30	0.01	0.07	
5/20/2004	7:30:44	815.54	1.19	0.07	0.07	
5/20/2004	7:31:14	55.01	101.89	-0.02	0.07	
5/20/2004	7:31:44	0.18	329.46	-0.04	0.07	
5/20/2004	7:32:14	0.00	356.59	-0.04	0.07	
5/20/2004	7:32:44	0.00	355.79	-0.04	0.07	
5/20/2004	7:33:14	0.00	357.72	-0.04	0.07	ZERO NOx
5/20/2004	7:33:44	0.00	356.59	-0.04	0.07	357 CO
5/20/2004	7:34:14	0.00	357.80	-0.04	0.07	
5/20/2004	7:34:44	0.05	355.41	-0.04	0.07	
5/20/2004	7:35:14	192.77	351.31	-0.03	0.07	
5/20/2004	7:35:44	459.55	158.35	-0.02	0.07	
5/20/2004	7:36:14	461.29	6.92	-0.02	0.07	
5/20/2004	7:36:44	461.23	0.59	-0.03	0.07	448 NOx
5/20/2004	7:37:14	461.24	1.15	-0.03	0.06	
5/20/2004	7:37:44	461.26	0.64	-0.03	0.06	ZERO CO
5/20/2004	7:38:14	445.50	1.16	0.02	0.06	
5/20/2004	7:38:44	56.46	15.39	-0.01	0.07	
5/20/2004	7:39:14	0.17	52.14	-0.05	0.07	
5/20/2004	7:39:44	-0.02	58.28	-0.05	0.07	
5/20/2004	7:40:14	-0.02	57.53	-0.05	0.07	
5/20/2004	7:40:44	0.00	58.40	-0.05	0.07	
5/20/2004	7:41:14	0.00	57.15	-0.05	0.07	
5/20/2004	7:41:44	0.02	58.92	-0.05	0.07	
5/20/2004	7:42:14	0.05	57.30	-0.05	0.07	ZERO O2, CO2
5/20/2004	7:42:44	0.05	58.75	-0.05	0.07	58.6 CO
5/20/2004	7:43:14	0.00	58.23	0.21	0.11	
5/20/2004	7:43:44	0.00	46.60	5.76	12.48	

5/20/2004	7:44:14	0.05	6.52	6.14	14.63	
5/20/2004	7:44:44	0.00	-1.28	6.14	14.60	
5/20/2004	7:45:14	0.00	-0.91	6.14	14.82	
5/20/2004	7:45:44	0.00	-1.29	6.14	15.07	
5/20/2004	7:46:14	0.00	-0.87	6.14	15.06	5.99 O2, 15.01 CO2
5/20/2004	7:46:44	0.00	-1.36	6.14	15.06	
5/20/2004	7:47:14	0.00	-0.85	8.01	13.86	
5/20/2004	7:47:44	0.00	-2.21	14.02	5.43	
5/20/2004	7:48:14	0.00	0.21	14.27	4.92	
5/20/2004	7:48:44	0.00	-0.52	14.27	4.90	
5/20/2004	7:49:14	0.00	-0.06	14.27	4.90	
5/20/2004	7:49:44	0.00	-0.21	14.27	4.90	13.92 O2, 4.987 CO2
5/20/2004	7:50:14	0.00	0.02	14.27	4.90	
5/20/2004	7:50:44	172.14	-0.19	13.03	2.13	BIAS CHECK
5/20/2004	7:51:14	789.89	0.29	1.35	0.08	
5/20/2004	7:51:44	819.50	1.52	1.03	0.07	
5/20/2004	7:52:14	815.66	0.77	1.06	0.07	
5/20/2004	7:52:44	815.61	1.43	1.04	0.07	854 NOx
5/20/2004	7:53:14	815.57	1.20	1.04	0.07	LEAK AROUND O-RING
5/20/2004	7:53:44	814.55	1.52	1.04	0.07	IN FILTER HOLDER
5/20/2004	7:54:14	803.40	0.85	2.41	0.07	
5/20/2004	7:54:44	158.75	2.03	18.93	0.10	
5/20/2004	7:55:14	352.63	0.88	9.50	0.10	
5/20/2004	7:55:44	822.54	2.17	0.42	0.07	
5/20/2004	7:56:14	853.58	0.65	0.03	0.07	
5/20/2004	7:56:44	855.76	1.20	0.02	0.07	
5/20/2004	7:57:14	855.80	0.61	0.01	0.07	
5/20/2004	7:57:44	855.80	0.78	0.01	0.07	854 NOx
5/20/2004	7:58:14	855.78	1.42	0.01	0.07	
5/20/2004	7:58:44	855.81	0.80	0.01	0.07	
5/20/2004	7:59:14	556.48	1.49	6.85	1.27	
5/20/2004	7:59:44	30.84	-0.90	13.81	4.59	
5/20/2004	8:00:14	2.74	0.36	14.13	4.83	
5/20/2004	8:00:44	-0.02	-0.53	14.17	4.84	
5/20/2004	8:01:14	0.00	0.33	14.18	4.85	ZERO NOx
5/20/2004	8:01:44	-0.05	-0.61	14.19	4.84	13.92 O2, 4.987 CO2
5/20/2004	8:02:14	-0.08	-0.05	14.20	4.84	ZERO CO
5/20/2004	8:02:44	-0.05	-0.24	14.19	4.83	
5/20/2004	8:03:14	-0.07	4.91	4.58	2.62	
5/20/2004	8:03:44	0.00	40.19	0.15	0.13	
5/20/2004	8:04:14	0.00	56.77	-0.02	0.07	
5/20/2004	8:04:44	0.00	57.85	-0.03	0.07	
5/20/2004	8:05:14	-0.02	57.37	-0.04	0.07	ZERO O2, CO2
5/20/2004	8:05:44	-0.03	58.50	-0.04	0.07	
5/20/2004	8:06:14	0.00	57.56	-0.04	0.07	
5/20/2004	8:06:44	0.00	58.43	-0.04	0.07	58.6 CO
5/20/2004	8:07:14	0.00	57.14	-0.04	0.07	
5/20/2004	8:07:44	0.00	58.58	-0.04	0.07	
5/20/2004	8:08:14	0.00	57.26	0.05	0.07	
5/20/2004	8:08:44	0.00	53.70	11.50	0.08	
5/20/2004	8:09:14	1.75	23.21	19.24	0.11	
5/20/2004	8:09:44	1.80	6.82	20.73	0.13	
5/20/2004	8:10:14	1.81	2.62	21.09	0.13	
5/20/2004	8:10:44	1.86	2.34	21.17	0.13	
5/20/2004	8:11:14	1.85	1.96	21.21	0.13	
5/20/2004	8:11:44	1.50	1.87	21.21	0.13	
5/20/2004	8:12:14	0.00	2.50	21.21	0.13	
5/20/2004	8:12:44	0.00	1.75	21.22	0.13	
5/20/2004	8:13:14	0.00	2.52	21.22	0.13	
5/20/2004	8:13:44	0.00	1.73	21.22	0.13	
5/20/2004	8:14:14	0.00	2.66	21.21	0.12	
5/20/2004	8:14:44	0.06	1.83	21.21	0.12	
5/20/2004	8:15:14	0.00	2.37	21.21	0.12	
5/20/2004	8:15:44	0.05	1.54	21.21	0.12	
5/20/2004	8:16:14	0.02	1.84	21.20	0.12	
5/20/2004	8:16:44	0.02	2.17	21.20	0.12	
5/20/2004	8:17:14	0.00	2.03	21.20	0.12	
5/20/2004	8:17:44	0.00	2.55	21.19	0.12	
5/20/2004	8:18:14	0.00	1.74	21.19	0.12	

5/20/2004	8:18:44	0.02	2.41	21.19	0.12
5/20/2004	8:19:14	0.05	1.31	21.19	0.11
5/20/2004	8:19:44	0.00	2.71	21.18	0.11
5/20/2004	8:20:14	0.05	1.08	21.18	0.11
5/20/2004	8:20:44	0.05	2.16	21.17	0.11
5/20/2004	8:21:14	0.00	1.92	21.17	0.11
5/20/2004	8:21:44	0.05	1.39	21.17	0.11
5/20/2004	8:22:14	0.00	1.49	21.16	0.11
5/20/2004	8:22:44	0.03	1.17	21.16	0.11
5/20/2004	8:23:14	0.05	2.51	21.16	0.11
5/20/2004	8:23:44	0.00	0.82	21.15	0.11
5/20/2004	8:24:14	0.08	2.05	21.15	0.11
5/20/2004	8:24:44	0.00	0.70	21.15	0.11
5/20/2004	8:25:14	0.00	2.16	21.14	0.11
5/20/2004	8:25:44	0.00	1.10	21.14	0.11
5/20/2004	8:26:14	0.05	1.56	21.14	0.11
5/20/2004	8:26:44	0.00	1.46	21.13	0.11
5/20/2004	8:27:14	0.05	1.21	21.13	0.11
5/20/2004	8:27:44	0.00	1.37	21.14	0.11
5/20/2004	8:28:14	0.00	1.14	21.14	0.11
5/20/2004	8:28:44	0.00	1.47	21.15	0.11
5/20/2004	8:29:14	0.00	0.81	21.16	0.11
5/20/2004	8:29:44	0.00	1.43	21.17	0.11
5/20/2004	8:30:14	0.00	0.71	21.18	0.11
5/20/2004	8:30:44	0.00	1.72	21.20	0.11
5/20/2004	8:31:14	0.00	0.63	21.21	0.11
5/20/2004	8:31:44	0.00	1.98	21.22	0.11
5/20/2004	8:32:14	0.00	0.59	21.23	0.11
5/20/2004	8:32:44	0.00	1.57	21.24	0.11
5/20/2004	8:33:14	0.00	1.03	21.25	0.11
5/20/2004	8:33:44	0.00	1.21	21.26	0.10
5/20/2004	8:34:14	0.00	1.00	21.27	0.11
5/20/2004	8:34:44	0.00	1.13	21.28	0.11
5/20/2004	8:35:14	0.00	0.59	21.29	0.11
5/20/2004	8:35:44	0.00	1.18	21.30	0.10
5/20/2004	8:36:14	0.00	1.42	21.31	0.11
5/20/2004	8:36:44	0.00	1.07	21.31	0.11
5/20/2004	8:37:14	0.00	1.43	21.32	0.11
5/20/2004	8:37:44	0.00	1.16	21.32	0.11
5/20/2004	8:38:14	-0.03	1.48	21.33	0.11
5/20/2004	8:38:44	0.00	1.22	21.33	0.11
5/20/2004	8:39:14	-0.03	1.70	21.34	0.10
5/20/2004	8:39:44	0.00	0.76	21.34	0.11
5/20/2004	8:40:14	0.00	2.48	21.35	0.11
5/20/2004	8:40:44	-0.04	0.93	21.35	0.10
5/20/2004	8:41:14	-0.03	2.03	21.36	0.11
5/20/2004	8:41:44	0.00	0.82	21.36	0.11
5/20/2004	8:42:14	0.00	2.37	21.37	0.11
5/20/2004	8:42:44	0.00	1.14	21.37	0.11
5/20/2004	8:43:14	0.00	2.11	21.37	0.10
5/20/2004	8:43:44	0.00	1.62	21.38	0.11
5/20/2004	8:44:14	0.00	2.18	21.38	0.11
5/20/2004	8:44:44	0.00	1.94	21.38	0.11
5/20/2004	8:45:14	0.00	1.32	21.38	0.11
5/20/2004	8:45:44	0.00	2.20	21.38	0.11
5/20/2004	8:46:14	0.00	1.98	21.37	0.11
5/20/2004	8:46:44	0.00	1.96	21.37	0.11
5/20/2004	8:47:14	0.00	1.41	21.36	0.12
5/20/2004	8:47:44	0.00	2.54	21.35	0.12
5/20/2004	8:48:14	0.00	0.97	21.35	0.11
5/20/2004	8:48:44	0.00	2.45	21.35	0.11
5/20/2004	8:49:14	0.00	1.35	21.35	0.12
5/20/2004	8:49:44	0.00	2.61	21.35	0.12
5/20/2004	8:50:14	0.00	1.79	21.35	0.11
5/20/2004	8:50:44	0.00	2.66	21.35	0.12
5/20/2004	8:51:14	0.00	1.88	21.36	0.12
5/20/2004	8:51:44	0.00	2.73	21.36	0.12
5/20/2004	8:52:14	0.00	1.85	21.36	0.12
5/20/2004	8:52:44	0.00	2.30	21.36	0.12

5/20/2004	8:53:14	0.00	1.81	21.36	0.12
5/20/2004	8:53:44	0.00	2.38	21.36	0.12
5/20/2004	8:54:14	0.00	2.20	21.35	0.12
5/20/2004	8:54:44	0.00	2.31	21.35	0.11
5/20/2004	8:55:14	0.05	2.18	21.34	0.11
5/20/2004	8:55:44	0.03	2.03	21.34	0.11
5/20/2004	8:56:14	0.02	2.55	21.33	0.11
5/20/2004	8:56:44	0.05	1.96	21.32	0.11
5/20/2004	8:57:14	0.00	2.79	21.32	0.11
5/20/2004	8:57:44	0.01	1.93	21.31	0.11
5/20/2004	8:58:14	0.04	2.72	21.30	0.11
5/20/2004	8:58:44	0.00	1.32	21.29	0.11
5/20/2004	8:59:14	0.00	2.30	21.28	0.11
5/20/2004	8:59:44	0.00	1.96	21.28	0.11
5/20/2004	9:00:14	0.00	2.26	21.27	0.11
5/20/2004	9:00:44	0.00	1.90	21.26	0.11
5/20/2004	9:01:14	0.02	1.36	21.25	0.11
5/20/2004	9:01:44	0.00	2.15	21.24	0.11
5/20/2004	9:02:14	0.00	2.01	21.24	0.11
5/20/2004	9:02:44	0.00	2.22	21.23	0.11
5/20/2004	9:03:14	0.00	1.24	21.22	0.11
5/20/2004	9:03:44	0.00	2.52	21.21	0.11
5/20/2004	9:04:14	0.00	0.92	21.21	0.10
5/20/2004	9:04:44	0.00	2.08	21.21	0.10
5/20/2004	9:05:14	0.00	0.99	21.21	0.10
5/20/2004	9:05:44	0.03	1.56	21.21	0.10
5/20/2004	9:06:14	0.00	1.06	21.22	0.10
5/20/2004	9:06:44	0.00	2.17	21.22	0.10
5/20/2004	9:07:14	0.00	1.88	21.23	0.10
5/20/2004	9:07:44	0.00	1.38	21.24	0.10
5/20/2004	9:08:14	0.00	2.00	21.25	0.10
5/20/2004	9:08:44	0.00	1.18	21.26	0.10
5/20/2004	9:09:14	0.00	1.73	21.27	0.10
5/20/2004	9:09:44	-0.02	0.91	21.28	0.10
5/20/2004	9:10:14	0.00	2.50	21.28	0.10
5/20/2004	9:10:44	0.00	0.99	21.29	0.10
5/20/2004	9:11:14	0.00	2.37	21.30	0.10
5/20/2004	9:11:44	0.00	0.58	21.31	0.10
5/20/2004	9:12:14	0.00	2.15	21.31	0.10
5/20/2004	9:12:44	0.00	1.23	21.32	0.11
5/20/2004	9:13:14	0.00	1.83	21.32	0.10
5/20/2004	9:13:44	0.00	1.61	21.33	0.10
5/20/2004	9:14:14	-0.05	1.39	21.33	0.10
5/20/2004	9:14:44	0.02	2.23	21.34	0.11
5/20/2004	9:15:14	0.00	0.81	21.34	0.11
5/20/2004	9:15:44	-0.02	2.32	21.34	0.11
5/20/2004	9:16:14	0.00	1.53	21.34	0.11
5/20/2004	9:16:44	-0.02	2.04	21.35	0.11
5/20/2004	9:17:14	0.00	1.31	21.35	0.10
5/20/2004	9:17:44	-0.03	2.62	21.35	0.11
5/20/2004	9:18:14	0.00	1.41	21.35	0.11
5/20/2004	9:18:44	0.00	2.31	21.36	0.11
5/20/2004	9:19:14	0.00	1.88	21.36	0.11
5/20/2004	9:19:44	0.00	1.94	21.36	0.11
5/20/2004	9:20:14	0.00	1.58	21.37	0.11
5/20/2004	9:20:44	0.00	2.17	21.37	0.11
5/20/2004	9:21:14	0.00	1.93	21.37	0.11
5/20/2004	9:21:44	0.00	2.19	21.37	0.11
5/20/2004	9:22:14	0.00	2.19	21.38	0.11
5/20/2004	9:22:44	0.00	2.29	21.38	0.11
5/20/2004	9:23:14	0.00	2.58	21.38	0.10
5/20/2004	9:23:44	-0.03	1.91	21.38	0.10
5/20/2004	9:24:14	0.00	2.55	21.39	0.11
5/20/2004	9:24:44	0.00	1.35	21.39	0.11
5/20/2004	9:25:14	0.00	2.68	21.39	0.11
5/20/2004	9:25:44	-0.07	1.87	21.40	0.10
5/20/2004	9:26:14	0.00	2.60	21.40	0.11
5/20/2004	9:26:44	-0.07	2.01	21.40	0.10
5/20/2004	9:27:14	0.00	1.77	21.40	0.11

5/20/2004	9:27:44	-0.02	2.56	21.41	0.11
5/20/2004	9:28:14	-0.02	1.94	21.41	0.11
5/20/2004	9:28:44	0.00	2.87	21.41	0.11
5/20/2004	9:29:14	0.00	1.36	21.41	0.11
5/20/2004	9:29:44	0.00	2.61	21.41	0.11
5/20/2004	9:30:14	0.00	1.48	21.42	0.11
5/20/2004	9:30:44	0.00	2.66	21.42	0.11
5/20/2004	9:31:14	0.00	1.89	21.42	0.11
5/20/2004	9:31:44	-0.05	2.69	21.42	0.11
5/20/2004	9:32:14	0.00	1.86	21.43	0.11
5/20/2004	9:32:44	0.00	2.63	21.43	0.11
5/20/2004	9:33:14	0.00	2.23	21.43	0.11
5/20/2004	9:33:44	0.00	2.28	21.43	0.11
5/20/2004	9:34:14	0.00	1.88	21.43	0.11
5/20/2004	9:34:44	0.00	2.89	21.43	0.11
5/20/2004	9:35:14	0.00	1.85	21.44	0.11
5/20/2004	9:35:44	0.00	2.64	21.44	0.11
5/20/2004	9:36:14	0.00	2.23	21.44	0.11
5/20/2004	9:36:44	0.00	2.27	21.44	0.11
5/20/2004	9:37:14	0.00	2.62	21.44	0.10
5/20/2004	9:37:44	0.00	2.30	21.44	0.10
5/20/2004	9:38:14	0.00	2.60	21.44	0.10
5/20/2004	9:38:44	0.00	2.34	21.44	0.10
5/20/2004	9:39:14	0.00	2.56	21.43	0.10
5/20/2004	9:39:44	0.02	1.96	21.42	0.10
5/20/2004	9:40:14	0.02	2.80	21.41	0.10
5/20/2004	9:40:44	0.07	2.08	21.40	0.10
5/20/2004	9:41:14	0.00	2.80	21.39	0.10
5/20/2004	9:41:44	0.00	2.06	21.38	0.10
5/20/2004	9:42:14	0.00	2.79	21.37	0.10
5/20/2004	9:42:44	0.00	2.14	21.36	0.10
5/20/2004	9:43:14	0.00	3.07	21.35	0.10
5/20/2004	9:43:44	0.00	1.85	21.33	0.10
5/20/2004	9:44:14	0.00	2.65	21.32	0.10
5/20/2004	9:44:44	0.00	2.23	21.31	0.10
5/20/2004	9:45:14	0.00	2.26	21.30	0.10
5/20/2004	9:45:44	0.02	2.21	21.28	0.10
5/20/2004	9:46:14	0.00	2.31	21.27	0.10
5/20/2004	9:46:44	0.00	2.57	21.27	0.10
5/20/2004	9:47:14	0.00	1.50	21.27	0.10
5/20/2004	9:47:44	0.05	3.05	21.26	0.10
5/20/2004	9:48:14	0.00	1.28	21.26	0.10
5/20/2004	9:48:44	0.00	2.56	21.27	0.10
5/20/2004	9:49:14	0.00	1.87	21.27	0.10
5/20/2004	9:49:44	0.00	2.29	21.27	0.10
5/20/2004	9:50:14	0.00	1.44	21.28	0.10
5/20/2004	9:50:44	0.00	2.32	21.29	0.10
5/20/2004	9:51:14	0.00	1.88	21.29	0.10
5/20/2004	9:51:44	0.00	2.61	21.30	0.10
5/20/2004	9:52:14	0.00	1.63	21.31	0.10
5/20/2004	9:52:44	0.00	1.74	21.31	0.10
5/20/2004	9:53:14	-0.02	1.93	21.31	0.10
5/20/2004	9:53:44	0.00	1.79	21.32	0.09
5/20/2004	9:54:14	0.00	1.97	21.32	0.10
5/20/2004	9:54:44	0.00	1.15	21.33	0.09
5/20/2004	9:55:14	0.00	2.38	21.34	0.09
5/20/2004	9:55:44	-0.02	1.71	21.34	0.09
5/20/2004	9:56:14	0.00	2.64	21.35	0.09
5/20/2004	9:56:44	0.00	1.88	21.35	0.09
5/20/2004	9:57:14	0.00	2.49	21.36	0.09
5/20/2004	9:57:44	0.00	1.73	21.36	0.08
5/20/2004	9:58:14	0.00	2.25	21.36	0.09
5/20/2004	9:58:44	0.00	1.55	21.36	0.08
5/20/2004	9:59:14	0.00	2.22	21.36	0.08
5/20/2004	9:59:44	-0.02	1.92	21.36	0.09
5/20/2004	10:00:14	0.00	2.04	21.36	0.09
5/20/2004	10:00:44	0.00	2.28	21.36	0.09
5/20/2004	10:01:14	0.00	1.87	21.36	0.10
5/20/2004	10:01:44	0.00	2.23	21.37	0.10

5/20/2004	10:02:14	0.00	1.41	21.36	0.09
5/20/2004	10:02:44	0.00	2.66	21.37	0.10
5/20/2004	10:03:14	0.00	1.35	21.37	0.10
5/20/2004	10:03:44	0.00	2.07	21.37	0.10
5/20/2004	10:04:14	0.00	1.74	21.37	0.10
5/20/2004	10:04:44	-0.03	2.61	21.37	0.10
5/20/2004	10:05:14	0.00	1.90	21.36	0.10
5/20/2004	10:05:44	0.00	2.48	21.36	0.10
5/20/2004	10:06:14	0.00	1.72	21.37	0.10
5/20/2004	10:06:44	-0.02	2.37	21.36	0.10
5/20/2004	10:07:14	0.00	1.73	21.36	0.10
5/20/2004	10:07:44	-0.03	2.63	21.36	0.09
5/20/2004	10:08:14	0.00	1.90	21.36	0.10
5/20/2004	10:08:44	-0.03	2.68	21.36	0.10
5/20/2004	10:09:14	-0.01	1.86	21.36	0.10
5/20/2004	10:09:44	0.00	2.61	21.36	0.10
5/20/2004	10:10:14	0.00	1.93	21.36	0.09
5/20/2004	10:10:44	0.00	2.30	21.36	0.10
5/20/2004	10:11:14	0.00	2.55	21.36	0.10
5/20/2004	10:11:44	0.00	2.27	21.36	0.10
5/20/2004	10:12:14	0.00	2.61	21.37	0.10
5/20/2004	10:12:44	0.00	1.97	21.36	0.10
5/20/2004	10:13:14	0.00	2.79	21.37	0.10
5/20/2004	10:13:44	0.00	1.86	21.37	0.10
5/20/2004	10:14:14	0.00	2.64	21.37	0.10
5/20/2004	10:14:44	0.00	1.93	21.37	0.10
5/20/2004	10:15:14	0.00	2.94	21.37	0.10
5/20/2004	10:15:44	0.00	1.71	21.37	0.10
5/20/2004	10:16:14	0.00	2.09	21.37	0.10
5/20/2004	10:16:44	0.00	1.89	21.37	0.10
5/20/2004	10:17:14	0.00	2.46	21.37	0.10
5/20/2004	10:17:44	0.00	2.38	21.37	0.10
5/20/2004	10:18:14	0.00	2.27	21.37	0.10
5/20/2004	10:18:44	-0.03	2.97	21.37	0.09
5/20/2004	10:19:14	0.00	1.98	21.37	0.10
5/20/2004	10:19:44	0.00	2.58	21.37	0.10
5/20/2004	10:20:14	-0.04	1.89	21.37	0.10
5/20/2004	10:20:44	0.00	3.43	21.37	0.10
5/20/2004	10:21:14	-0.03	2.14	21.37	0.10
5/20/2004	10:21:44	0.00	2.80	21.37	0.10
5/20/2004	10:22:14	0.00	1.88	21.37	0.10
5/20/2004	10:22:44	0.00	3.06	21.37	0.09
5/20/2004	10:23:14	-0.02	2.44	21.37	0.09
5/20/2004	10:23:44	0.00	2.66	21.37	0.10
5/20/2004	10:24:14	0.00	2.24	21.37	0.10
5/20/2004	10:24:44	0.00	2.62	21.37	0.10
5/20/2004	10:25:14	-0.02	2.29	21.37	0.10
5/20/2004	10:25:44	0.00	2.66	21.37	0.10
5/20/2004	10:26:14	0.00	2.57	21.37	0.10
5/20/2004	10:26:44	0.00	2.43	21.37	0.10
5/20/2004	10:27:14	-0.03	2.42	21.37	0.10
5/20/2004	10:27:44	0.00	2.47	21.37	0.10
5/20/2004	10:28:14	0.00	2.71	21.37	0.10
5/20/2004	10:28:44	0.00	1.90	21.37	0.10
5/20/2004	10:29:14	-0.05	2.92	21.37	0.10
5/20/2004	10:29:44	0.00	1.98	21.37	0.11
5/20/2004	10:30:14	-0.02	2.81	21.37	0.11
5/20/2004	10:30:44	0.00	1.89	21.37	0.11
5/20/2004	10:31:14	0.00	2.87	21.37	0.11
5/20/2004	10:31:44	0.00	1.96	21.37	0.11
5/20/2004	10:32:14	-0.04	2.64	21.37	0.11
5/20/2004	10:32:44	-0.01	2.22	21.37	0.11
5/20/2004	10:33:14	0.00	2.58	21.37	0.11
5/20/2004	10:33:44	0.00	2.30	21.37	0.10
5/20/2004	10:34:14	0.00	2.67	21.37	0.11
5/20/2004	10:34:44	0.00	2.28	21.37	0.11
5/20/2004	10:35:14	-0.07	2.75	21.37	0.10
5/20/2004	10:35:44	0.00	2.77	21.37	0.11
5/20/2004	10:36:14	0.00	2.28	21.36	0.10

5/20/2004	10:36:44	0.00	3.06	21.36	0.11
5/20/2004	10:37:14	-0.04	2.03	21.36	0.11
5/20/2004	10:37:44	0.00	3.32	21.36	0.11
5/20/2004	10:38:14	0.00	2.16	21.36	0.10
5/20/2004	10:38:44	0.00	3.05	21.35	0.11
5/20/2004	10:39:14	0.00	2.22	21.35	0.10
5/20/2004	10:39:44	0.00	2.83	21.35	0.11
5/20/2004	10:40:14	0.00	2.30	21.35	0.10
5/20/2004	10:40:44	-0.02	2.42	21.35	0.10
5/20/2004	10:41:14	-0.02	2.73	21.35	0.10
5/20/2004	10:41:44	0.00	2.60	21.35	0.10
5/20/2004	10:42:14	0.00	2.42	21.34	0.10
5/20/2004	10:42:44	0.00	3.23	21.34	0.11
5/20/2004	10:43:14	0.00	2.62	21.34	0.11
5/20/2004	10:43:44	0.00	2.90	21.34	0.11
5/20/2004	10:44:14	0.00	2.39	21.34	0.11
5/20/2004	10:44:44	0.00	2.45	21.34	0.11
5/20/2004	10:45:14	-0.03	3.09	21.34	0.11
5/20/2004	10:45:44	-0.02	1.85	21.34	0.10
5/20/2004	10:46:14	0.00	3.31	21.34	0.11
5/20/2004	10:46:44	-0.08	1.92	21.34	0.11
5/20/2004	10:47:14	0.00	2.65	21.34	0.11
5/20/2004	10:47:44	0.00	1.93	21.34	0.11
5/20/2004	10:48:14	-0.01	3.02	21.34	0.10
5/20/2004	10:48:44	-0.02	2.42	21.35	0.10
5/20/2004	10:49:14	0.00	3.08	21.35	0.10
5/20/2004	10:49:44	-0.02	2.76	21.35	0.10
5/20/2004	10:50:14	-0.02	2.38	21.35	0.10
5/20/2004	10:50:44	0.00	2.81	21.35	0.10
5/20/2004	10:51:14	0.00	2.26	21.35	0.09
5/20/2004	10:51:44	0.00	2.91	21.36	0.10
5/20/2004	10:52:14	-0.02	1.88	21.36	0.10
5/20/2004	10:52:44	-0.02	3.06	21.36	0.10
5/20/2004	10:53:14	0.00	2.17	21.36	0.10
5/20/2004	10:53:44	0.00	3.19	21.36	0.09
5/20/2004	10:54:14	0.00	2.39	21.36	0.10
5/20/2004	10:54:44	0.00	2.74	21.36	0.10
5/20/2004	10:55:14	0.00	3.09	21.36	0.10
5/20/2004	10:55:44	0.00	2.32	21.36	0.10
5/20/2004	10:56:14	-0.03	2.59	21.36	0.09
5/20/2004	10:56:44	0.00	2.24	21.36	0.10
5/20/2004	10:57:14	0.00	3.09	21.36	0.10
5/20/2004	10:57:44	0.00	2.65	21.36	0.10
5/20/2004	10:58:14	0.00	3.23	21.35	0.10
5/20/2004	10:58:44	0.00	2.02	21.35	0.10
5/20/2004	10:59:14	0.00	3.09	21.35	0.10
5/20/2004	10:59:44	0.00	2.12	21.35	0.10
5/20/2004	11:00:14	0.00	3.53	21.35	0.10
5/20/2004	11:00:44	-0.02	2.37	21.35	0.09
5/20/2004	11:01:14	-0.02	2.85	21.35	0.09
5/20/2004	11:01:44	0.00	2.31	21.35	0.10
5/20/2004	11:02:14	-0.04	2.77	21.35	0.10
5/20/2004	11:02:44	-0.06	3.03	21.35	0.09
5/20/2004	11:03:14	-0.02	2.22	21.35	0.10
5/20/2004	11:03:44	0.00	3.00	21.35	0.10
5/20/2004	11:04:14	-0.03	1.92	21.35	0.09
5/20/2004	11:04:44	0.00	3.32	21.34	0.10
5/20/2004	11:05:14	0.00	2.07	21.34	0.10
5/20/2004	11:05:44	0.00	3.15	21.34	0.10
5/20/2004	11:06:14	-0.06	2.14	21.34	0.10
5/20/2004	11:06:44	0.00	2.81	21.34	0.10
5/20/2004	11:07:14	0.00	2.02	21.34	0.10
5/20/2004	11:07:44	0.00	3.05	21.34	0.10
5/20/2004	11:08:14	0.00	2.30	21.34	0.10
5/20/2004	11:08:44	-0.05	2.65	21.34	0.10
5/20/2004	11:09:14	0.00	2.22	21.34	0.09
5/20/2004	11:09:44	-0.03	2.59	21.34	0.10
5/20/2004	11:10:14	-0.07	2.63	21.34	0.10
5/20/2004	11:10:44	0.00	2.31	21.34	0.10

5/20/2004	11:11:14	-0.03	2.80	21.34	0.09
5/20/2004	11:11:44	0.00	2.05	21.34	0.09
5/20/2004	11:12:14	0.00	2.79	21.34	0.10
5/20/2004	11:12:44	0.00	2.50	21.34	0.10
5/20/2004	11:13:14	0.00	3.20	21.34	0.10
5/20/2004	11:13:44	0.00	2.42	21.35	0.10
5/20/2004	11:14:14	0.00	2.79	21.35	0.10
5/20/2004	11:14:44	0.00	2.45	21.35	0.10
5/20/2004	11:15:14	-0.02	2.66	21.35	0.09
5/20/2004	11:15:44	0.00	2.61	21.35	0.10
5/20/2004	11:16:14	-0.02	2.45	21.35	0.10
5/20/2004	11:16:44	-0.01	2.74	21.36	0.10
5/20/2004	11:17:14	0.00	2.32	21.36	0.10
5/20/2004	11:17:44	0.00	3.04	21.36	0.10
5/20/2004	11:18:14	0.00	2.46	21.36	0.09
5/20/2004	11:18:44	-0.04	2.96	21.36	0.10
5/20/2004	11:19:14	0.00	1.93	21.37	0.09
5/20/2004	11:19:44	0.00	3.34	21.37	0.10
5/20/2004	11:20:14	0.00	2.01	21.37	0.10
5/20/2004	11:20:44	-0.05	3.38	21.37	0.09
5/20/2004	11:21:14	-0.02	2.47	21.37	0.10
5/20/2004	11:21:44	0.00	3.57	21.37	0.09
5/20/2004	11:22:14	-0.04	2.41	21.37	0.09
5/20/2004	11:22:44	-0.08	2.75	21.37	0.08
5/20/2004	11:23:14	-0.05	2.42	21.37	0.08
5/20/2004	11:23:44	-0.02	2.30	21.38	0.09
5/20/2004	11:24:14	0.00	2.59	21.38	0.09
5/20/2004	11:24:44	0.00	2.42	21.38	0.09
5/20/2004	11:25:14	0.00	3.28	21.38	0.09
5/20/2004	11:25:44	0.00	2.49	21.38	0.09
5/20/2004	11:26:14	0.00	3.32	21.38	0.09
5/20/2004	11:26:44	0.03	2.07	21.38	0.09
5/20/2004	11:27:14	-0.03	3.39	21.38	0.08
5/20/2004	11:27:44	0.00	2.17	21.38	0.09
5/20/2004	11:28:14	0.00	3.34	21.38	0.09
5/20/2004	11:28:44	0.00	2.01	21.38	0.09
5/20/2004	11:29:14	0.00	3.04	21.38	0.09
5/20/2004	11:29:44	0.00	2.15	21.38	0.09
5/20/2004	11:30:14	0.00	3.45	21.39	0.09
5/20/2004	11:30:44	0.00	1.92	21.39	0.09
5/20/2004	11:31:14	-0.02	3.02	21.39	0.09
5/20/2004	11:31:44	-0.02	2.61	21.38	0.09
5/20/2004	11:32:14	-0.02	2.91	21.38	0.09
5/20/2004	11:32:44	0.00	2.45	21.39	0.09
5/20/2004	11:33:14	0.00	2.96	21.39	0.09
5/20/2004	11:33:44	0.00	2.76	21.39	0.08
5/20/2004	11:34:14	0.00	2.45	21.39	0.09
5/20/2004	11:34:44	0.00	3.50	21.39	0.09
5/20/2004	11:35:14	0.00	2.02	21.39	0.09
5/20/2004	11:35:44	0.00	3.05	21.39	0.09
5/20/2004	11:36:14	-0.03	2.14	21.39	0.08
5/20/2004	11:36:44	0.00	3.20	21.39	0.09
5/20/2004	11:37:14	0.00	2.37	21.39	0.09
5/20/2004	11:37:44	0.00	3.02	21.39	0.09
5/20/2004	11:38:14	0.00	3.08	21.39	0.09
5/20/2004	11:38:44	-0.02	2.39	21.39	0.09
5/20/2004	11:39:14	0.00	3.02	21.39	0.09
5/20/2004	11:39:44	0.00	2.26	21.39	0.09
5/20/2004	11:40:14	0.00	3.44	21.39	0.09
5/20/2004	11:40:44	0.00	2.45	21.39	0.09
5/20/2004	11:41:14	0.00	3.22	21.39	0.09
5/20/2004	11:41:44	0.00	2.42	21.39	0.09
5/20/2004	11:42:14	0.00	3.09	21.39	0.09
5/20/2004	11:42:44	0.00	3.04	21.39	0.09
5/20/2004	11:43:14	-0.06	2.76	21.39	0.09
5/20/2004	11:43:44	-0.04	3.05	21.39	0.09
5/20/2004	11:44:14	-0.03	2.43	21.39	0.09
5/20/2004	11:44:44	0.00	3.08	21.39	0.09
5/20/2004	11:45:14	0.00	2.20	21.38	0.09

5/20/2004	11:45:44	0.00	3.10	21.38	0.09
5/20/2004	11:46:14	-0.02	2.57	21.38	0.09
5/20/2004	11:46:44	0.00	3.55	21.37	0.09
5/20/2004	11:47:14	0.00	2.48	21.37	0.09
5/20/2004	11:47:44	-0.02	3.04	21.36	0.09
5/20/2004	11:48:14	0.00	2.06	21.36	0.09
5/20/2004	11:48:44	-0.05	3.06	21.36	0.09
5/20/2004	11:49:14	-0.03	2.15	21.36	0.09
5/20/2004	11:49:44	0.00	3.04	21.35	0.09
5/20/2004	11:50:14	0.00	2.01	21.35	0.09
5/20/2004	11:50:44	0.00	3.32	21.35	0.09
5/20/2004	11:51:14	0.00	2.12	21.35	0.09
5/20/2004	11:51:44	0.00	3.05	21.35	0.09
5/20/2004	11:52:14	0.00	1.92	21.35	0.09
5/20/2004	11:52:44	-0.05	2.71	21.35	0.08
5/20/2004	11:53:14	-0.03	2.42	21.35	0.09
5/20/2004	11:53:44	0.00	3.09	21.35	0.09
5/20/2004	11:54:14	0.00	2.75	21.35	0.09
5/20/2004	11:54:44	0.00	2.69	21.34	0.09
5/20/2004	11:55:14	0.00	3.11	21.34	0.09
5/20/2004	11:55:44	0.00	2.43	21.34	0.09
5/20/2004	11:56:14	0.00	3.23	21.34	0.09
5/20/2004	11:56:44	0.00	2.90	21.34	0.09
5/20/2004	11:57:14	0.00	3.07	21.34	0.09
5/20/2004	11:57:44	0.00	2.39	21.34	0.09
5/20/2004	11:58:14	-0.01	3.26	21.34	0.09
5/20/2004	11:58:44	-0.03	2.02	21.33	0.09
5/20/2004	11:59:14	0.00	2.80	21.33	0.09
5/20/2004	11:59:44	-0.02	2.30	21.33	0.09
5/20/2004	12:00:14	0.00	2.62	21.33	0.09
5/20/2004	12:00:44	-0.04	2.25	21.33	0.09
5/20/2004	12:01:14	0.00	2.98	21.33	0.09
5/20/2004	12:01:44	0.00	2.44	21.33	0.09
5/20/2004	12:02:14	0.00	2.44	21.32	0.09
5/20/2004	12:02:44	0.00	3.04	21.32	0.09
5/20/2004	12:03:14	0.00	1.86	21.31	0.09
5/20/2004	12:03:44	0.00	3.42	21.31	0.09
5/20/2004	12:04:14	0.00	2.16	21.30	0.09
5/20/2004	12:04:44	0.00	3.20	21.30	0.09
5/20/2004	12:05:14	0.00	2.35	21.29	0.09
5/20/2004	12:05:44	0.00	3.00	21.29	0.08
5/20/2004	12:06:14	0.00	2.64	21.28	0.09
5/20/2004	12:06:44	0.00	2.91	21.28	0.09
5/20/2004	12:07:14	0.00	2.82	21.28	0.09
5/20/2004	12:07:44	0.00	2.74	21.27	0.09
5/20/2004	12:08:14	0.00	3.06	21.27	0.10
5/20/2004	12:08:44	0.00	2.23	21.27	0.09
5/20/2004	12:09:14	0.00	3.08	21.26	0.10
5/20/2004	12:09:44	0.00	2.45	21.26	0.10
5/20/2004	12:10:14	0.00	3.42	21.26	0.10
5/20/2004	12:10:44	0.00	2.09	21.25	0.10
5/20/2004	12:11:14	0.00	3.33	21.25	0.10
5/20/2004	12:11:44	0.00	2.01	21.25	0.10
5/20/2004	12:12:14	-0.03	2.78	21.24	0.09
5/20/2004	12:12:44	0.00	2.26	21.24	0.10
5/20/2004	12:13:14	0.00	2.92	21.24	0.10
5/20/2004	12:13:44	0.00	2.22	21.24	0.10
5/20/2004	12:14:14	-0.03	2.72	21.24	0.10
5/20/2004	12:14:44	0.00	2.51	21.24	0.10
5/20/2004	12:15:14	0.00	2.78	21.24	0.10
5/20/2004	12:15:44	0.00	2.94	21.24	0.10
5/20/2004	12:16:14	0.00	2.92	21.24	0.10
5/20/2004	12:16:44	0.00	2.43	21.24	0.09
5/20/2004	12:17:14	0.00	2.77	21.23	0.10
5/20/2004	12:17:44	0.00	3.20	21.23	0.10
5/20/2004	12:18:14	0.00	2.35	21.23	0.10
5/20/2004	12:18:44	0.00	3.04	21.23	0.09
5/20/2004	12:19:14	0.00	2.15	21.23	0.09
5/20/2004	12:19:44	0.00	3.37	21.23	0.09

5/20/2004	12:20:14	0.00	2.36	21.23	0.09	
5/20/2004	12:20:44	0.00	3.20	21.23	0.09	
5/20/2004	12:21:14	0.00	2.46	21.22	0.09	
5/20/2004	12:21:44	0.00	2.99	21.22	0.09	
5/20/2004	12:22:14	0.00	3.01	21.22	0.09	
5/20/2004	12:22:44	-0.03	2.24	21.22	0.08	
5/20/2004	12:23:14	-0.01	2.63	21.22	0.09	
5/20/2004	12:23:44	-0.03	2.26	21.22	0.09	
5/20/2004	12:24:14	-0.05	3.28	21.21	0.09	
5/20/2004	12:24:44	0.00	2.13	21.21	0.09	
5/20/2004	12:25:14	0.00	2.78	21.21	0.09	
5/20/2004	12:25:44	-0.03	2.40	21.20	0.08	
5/20/2004	12:26:14	0.00	2.75	21.20	0.09	
5/20/2004	12:26:44	-0.07	1.99	21.20	0.09	
5/20/2004	12:27:14	0.00	3.01	21.20	0.09	
5/20/2004	12:27:44	0.00	1.90	21.19	0.09	
5/20/2004	12:28:14	-0.05	2.85	21.19	0.09	
5/20/2004	12:28:44	67.71	2.77	18.27	0.08	
5/20/2004	12:29:14	772.80	2.80	0.89	0.07	
5/20/2004	12:29:44	856.77	1.97	0.06	0.07	
5/20/2004	12:30:14	855.68	2.20	0.04	0.07	854 NOx
5/20/2004	12:30:44	855.11	1.92	0.03	0.07	
5/20/2004	12:31:14	853.73	2.28	0.03	0.07	
5/20/2004	12:31:44	813.02	2.33	0.11	0.07	
5/20/2004	12:32:14	59.62	16.75	0.01	0.07	
5/20/2004	12:32:44	0.00	55.17	-0.02	0.07	
5/20/2004	12:33:14	-0.02	58.12	-0.02	0.07	
5/20/2004	12:33:44	-0.02	59.16	-0.02	0.07	
5/20/2004	12:34:14	0.00	58.02	-0.02	0.07	ZERO O2, CO2
5/20/2004	12:34:44	0.00	59.40	-0.02	0.07	ZERO NOx
5/20/2004	12:35:14	0.00	58.34	2.81	0.29	58.8 CO
5/20/2004	12:35:44	0.00	40.16	13.18	4.37	
5/20/2004	12:36:14	-0.03	5.56	13.99	4.99	
5/20/2004	12:36:44	0.00	1.06	14.03	5.02	
5/20/2004	12:37:14	-0.01	0.54	14.03	5.02	
5/20/2004	12:37:44	-0.02	0.46	14.03	5.02	13.92 O2, 4.987 CO2
5/20/2004	12:38:14	0.00	0.51	14.03	5.02	ZERO CO
5/20/2004	12:38:44	-0.07	0.25	14.02	5.02	
5/20/2004	12:39:14	-0.07	-0.15	15.36	4.94	
5/20/2004	12:39:44	275.16	1.84	16.76	2.66	
5/20/2004	12:40:14	863.98	56.52	11.79	6.80	
5/20/2004	12:40:44	901.59	107.06	11.63	7.03	
5/20/2004	12:41:14	901.88	112.19	11.63	7.04	
5/20/2004	12:41:44	903.26	110.45	11.62	7.04	
5/20/2004	12:42:14	910.60	112.62	11.62	7.05	
5/20/2004	12:42:44	918.56	111.56	11.61	7.08	
5/20/2004	12:43:14	909.50	111.97	11.81	7.07	START RUN 7 FULL LOAD
5/20/2004	12:43:44	911.18	113.09	11.60	7.03	AVERAGES:
5/20/2004	12:44:14	911.17	111.72	11.59	7.02	NOX CO O2 CO2
5/20/2004	12:44:44	914.39	113.21	11.59	7.02	921.11 111.36 11.37 6.65
5/20/2004	12:45:14	914.91	110.79	11.80	7.00	
5/20/2004	12:45:44	914.02	111.33	11.60	6.99	
5/20/2004	12:46:14	919.18	110.35	11.60	6.98	
5/20/2004	12:46:44	917.87	110.04	11.61	6.97	
5/20/2004	12:47:14	918.43	109.34	11.60	6.96	
5/20/2004	12:47:44	915.67	110.30	11.59	6.96	
5/20/2004	12:48:14	916.01	110.56	11.59	6.96	
5/20/2004	12:48:44	914.68	109.63	11.59	6.95	
5/20/2004	12:49:14	912.87	110.90	11.57	6.95	
5/20/2004	12:49:44	913.73	110.18	11.57	6.94	
5/20/2004	12:50:14	913.06	111.50	11.56	6.94	
5/20/2004	12:50:44	184.22	111.35	15.21	3.46	LOST POWER TO PUMPS
5/20/2004	12:51:14	-0.05	92.38	20.46	0.10	DATA NOT INCLUDED IN AVERAGES
5/20/2004	12:51:44	0.00	46.86	20.63	0.09	LOST POWER TO PUMPS
5/20/2004	12:52:14	0.00	22.04	20.63	0.09	DATA NOT INCLUDED IN AVERAGES
5/20/2004	12:52:44	0.00	12.17	19.98	0.09	LOST POWER TO PUMPS
5/20/2004	12:53:14	0.00	31.95	12.32	5.29	DATA NOT INCLUDED IN AVERAGES
5/20/2004	12:53:44	0.00	99.97	11.57	6.84	LOST POWER TO PUMPS
5/20/2004	12:54:14	0.00	110.84	11.53	6.87	DATA NOT INCLUDED IN AVERAGES

5/20/2004	12:54:44	0.00	111.31	11.52	6.87
5/20/2004	12:55:14	752.79	109.75	11.51	6.86
5/20/2004	12:55:44	911.50	111.44	11.50	6.86
5/20/2004	12:56:14	913.97	111.24	11.48	6.86
5/20/2004	12:56:44	915.49	111.81	11.47	6.86
5/20/2004	12:57:14	918.27	111.32	11.47	6.85
5/20/2004	12:57:44	919.24	111.13	11.48	6.83
5/20/2004	12:58:14	919.62	111.57	11.48	6.81
5/20/2004	12:58:44	920.01	109.98	11.47	6.81
5/20/2004	12:59:14	921.19	110.88	11.47	6.80
5/20/2004	12:59:44	920.47	110.49	11.47	6.79
5/20/2004	13:00:14	922.42	110.05	11.47	6.78
5/20/2004	13:00:44	924.35	109.21	11.48	6.76
5/20/2004	13:01:14	921.94	107.78	11.48	6.75
5/20/2004	13:01:44	921.61	108.96	11.47	6.74
5/20/2004	13:02:14	919.26	107.58	11.48	6.73
5/20/2004	13:02:44	918.56	108.55	11.46	6.73
5/20/2004	13:03:14	920.06	107.87	11.44	6.74
5/20/2004	13:03:44	922.73	109.00	11.45	6.72
5/20/2004	13:04:14	926.18	109.21	11.44	6.71
5/20/2004	13:04:44	926.99	109.12	11.45	6.71
5/20/2004	13:05:14	924.60	109.98	11.43	6.70
5/20/2004	13:05:44	923.57	109.91	11.42	6.71
5/20/2004	13:06:14	925.40	110.10	11.41	6.70
5/20/2004	13:06:44	926.85	110.47	11.41	6.70
5/20/2004	13:07:14	926.70	110.47	11.40	6.70
5/20/2004	13:07:44	927.19	109.94	11.41	6.69
5/20/2004	13:08:14	926.44	110.23	11.42	6.68
5/20/2004	13:08:44	925.76	109.25	11.41	6.67
5/20/2004	13:09:14	926.82	109.86	11.41	6.67
5/20/2004	13:09:44	927.56	110.77	11.41	6.66
5/20/2004	13:10:14	927.78	109.43	11.41	6.65
5/20/2004	13:10:44	929.42	110.75	11.42	6.65
5/20/2004	13:11:14	928.67	109.77	11.43	6.63
5/20/2004	13:11:44	924.63	107.94	11.43	6.63
5/20/2004	13:12:14	922.17	108.12	11.41	6.63
5/20/2004	13:12:44	923.53	108.79	11.40	6.63
5/20/2004	13:13:14	924.23	109.32	11.39	6.63
5/20/2004	13:13:44	924.96	109.06	11.39	6.63
5/20/2004	13:14:14	924.62	109.95	11.40	6.62
5/20/2004	13:14:44	923.55	108.29	11.40	6.61
5/20/2004	13:15:14	922.80	108.48	11.40	6.61
5/20/2004	13:15:44	922.00	109.01	11.41	6.59
5/20/2004	13:16:14	921.61	108.57	11.39	6.60
5/20/2004	13:16:44	920.49	108.57	11.39	6.60
5/20/2004	13:17:14	920.54	108.56	11.39	6.59
5/20/2004	13:17:44	920.92	109.36	11.36	6.61
5/20/2004	13:18:14	921.84	109.35	11.36	6.61
5/20/2004	13:18:44	923.57	110.03	11.35	6.61
5/20/2004	13:19:14	923.52	110.74	11.35	6.61
5/20/2004	13:19:44	920.95	109.98	11.35	6.60
5/20/2004	13:20:14	920.76	112.59	11.34	6.60
5/20/2004	13:20:44	922.84	110.16	11.35	6.60
5/20/2004	13:21:14	920.77	110.55	11.34	6.59
5/20/2004	13:21:44	919.49	111.22	11.34	6.59
5/20/2004	13:22:14	920.79	111.64	11.33	6.59
5/20/2004	13:22:44	920.63	113.16	11.34	6.58
5/20/2004	13:23:14	920.68	111.19	11.32	6.58
5/20/2004	13:23:44	920.09	112.77	11.32	6.58
5/20/2004	13:24:14	923.96	112.96	11.31	6.58
5/20/2004	13:24:44	926.95	112.72	11.30	6.59
5/20/2004	13:25:14	926.94	113.62	11.29	6.59
5/20/2004	13:25:44	926.00	113.20	11.30	6.58
5/20/2004	13:26:14	926.63	113.50	11.29	6.58
5/20/2004	13:26:44	928.08	112.47	11.28	6.58
5/20/2004	13:27:14	925.94	113.24	11.29	6.57
5/20/2004	13:27:44	926.43	113.08	11.28	6.57
5/20/2004	13:28:14	926.33	113.45	11.29	6.56
5/20/2004	13:28:44	925.58	114.37	11.29	6.56

LOST POWER TO PUMPS
DATA NOT INCLUDED IN AVERAGES

5/20/2004	13:29:14	928.46	111.49	11.30	6.55
5/20/2004	13:29:44	925.33	111.06	11.31	6.54
5/20/2004	13:30:14	924.95	109.84	11.29	6.54
5/20/2004	13:30:44	923.02	111.28	11.27	6.55
5/20/2004	13:31:14	921.52	114.51	11.27	6.55
5/20/2004	13:31:44	921.63	111.72	11.27	6.55
5/20/2004	13:32:14	923.98	113.63	11.26	6.55
5/20/2004	13:32:44	925.31	112.60	11.27	6.55
5/20/2004	13:33:14	925.22	112.93	11.27	6.54
5/20/2004	13:33:44	925.91	112.94	11.28	6.53
5/20/2004	13:34:14	923.91	111.28	11.28	6.51
5/20/2004	13:34:44	922.08	111.93	11.29	6.51
5/20/2004	13:35:14	921.60	110.34	11.28	6.51
5/20/2004	13:35:44	921.55	111.23	11.26	6.52
5/20/2004	13:36:14	919.45	113.31	11.24	6.53
5/20/2004	13:36:44	919.32	114.17	11.23	6.54
5/20/2004	13:37:14	921.30	116.24	11.24	6.53
5/20/2004	13:37:44	920.31	113.60	11.25	6.52
5/20/2004	13:38:14	919.04	114.51	11.25	6.51
5/20/2004	13:38:44	919.60	114.24	11.25	6.52
5/20/2004	13:39:14	919.30	112.48	11.25	6.51
5/20/2004	13:39:44	916.45	114.95	11.25	6.51
5/20/2004	13:40:14	916.67	112.85	11.24	6.52
5/20/2004	13:40:44	918.10	115.71	11.23	6.52
5/20/2004	13:41:14	919.88	116.76	11.24	6.52
5/20/2004	13:41:44	920.02	113.78	11.23	6.51
5/20/2004	13:42:14	919.40	114.12	11.23	6.51
5/20/2004	13:42:44	917.97	113.41	11.23	6.52
5/20/2004	13:43:14	917.13	114.79	11.23	6.51
5/20/2004	13:43:44	919.16	114.19	11.23	6.51
5/20/2004	13:44:14	917.49	113.53	11.24	6.51
5/20/2004	13:44:44	917.81	115.03	11.24	6.51
5/20/2004	13:45:14	915.86	111.81	11.25	6.50
5/20/2004	13:45:44	913.19	113.79	11.24	6.50
5/20/2004	13:46:14	913.02	114.31	11.24	6.50
5/20/2004	13:46:44	914.55	112.89	11.24	6.50
5/20/2004	13:47:14	915.90	113.20	11.25	6.50
5/20/2004	13:47:44	919.08	110.74	11.26	6.50
5/20/2004	13:48:14	920.26	111.26	11.25	6.50
5/20/2004	13:48:44	918.54	110.86	11.26	6.50
5/20/2004	13:49:14	916.77	111.48	11.26	6.50
5/20/2004	13:49:44	919.00	112.20	11.25	6.50
5/20/2004	13:50:14	897.86	110.74	11.92	6.41
5/20/2004	13:50:44	449.54	160.03	16.10	3.56
5/20/2004	13:51:14	232.31	357.77	14.61	1.37
5/20/2004	13:51:44	736.60	154.81	1.32	0.11
5/20/2004	13:52:14	825.82	9.04	0.25	0.07
5/20/2004	13:52:44	832.75	-1.55	0.09	0.07
5/20/2004	13:53:14	835.42	-1.78	0.03	0.06
5/20/2004	13:53:44	834.92	-2.25	0.02	0.06
5/20/2004	13:54:14	833.87	-2.02	0.02	0.06
5/20/2004	13:54:44	833.57	-1.87	0.02	0.06
5/20/2004	13:55:14	833.54	-2.72	0.02	0.06
5/20/2004	13:55:44	831.87	-1.79	0.43	0.06
5/20/2004	13:56:14	195.23	-2.64	12.14	3.45
5/20/2004	13:56:44	8.95	-3.60	13.62	4.58
5/20/2004	13:57:14	5.67	-2.97	13.64	4.60
5/20/2004	13:57:44	5.65	-3.72	13.63	4.60
5/20/2004	13:58:14	5.64	-3.08	13.60	4.59
5/20/2004	13:58:44	4.19	-3.43	13.63	4.61
5/20/2004	13:59:14	3.73	-4.31	12.78	4.57
5/20/2004	13:59:44	3.86	6.83	3.68	0.77
5/20/2004	14:00:14	3.87	39.18	3.04	0.08
5/20/2004	14:00:44	3.83	46.08	3.04	0.07
5/20/2004	14:01:14	3.15	47.22	1.00	0.07
5/20/2004	14:01:44	1.89	51.58	-0.02	0.06
5/20/2004	14:02:14	1.84	54.85	-0.03	0.06
5/20/2004	14:02:44	1.87	53.95	-0.03	0.06
5/20/2004	14:03:14	1.47	54.37	-0.03	0.06

END RUN 7

854 NOx

13.92 O2, 4.987 CO2

ZERO CO

ZERO NOx

ZERO O2, CO2

5/20/2004	14:03:44	0.00	55.10	-0.03	0.06
5/20/2004	14:04:14	0.00	54.11	-0.03	0.06
5/20/2004	14:04:44	2.28	53.58	7.98	0.07
5/20/2004	14:05:14	3.81	28.61	19.31	0.10
5/20/2004	14:05:44	102.91	20.31	18.49	0.95
5/20/2004	14:06:14	225.56	407.33	17.16	2.21
5/20/2004	14:06:44	519.95	645.53	12.34	5.04
5/20/2004	14:07:14	773.55	378.73	11.04	6.67
5/20/2004	14:07:44	804.18	144.97	11.15	6.59
5/20/2004	14:08:14	831.22	118.25	11.20	6.54
5/20/2004	14:08:44	851.82	113.19	11.23	6.51
5/20/2004	14:09:14	867.70	110.54	11.23	6.51
5/20/2004	14:09:44	878.81	110.54	11.24	6.51
5/20/2004	14:10:14	887.99	109.20	11.24	6.51
5/20/2004	14:10:44	895.64	107.61	11.24	6.52
5/20/2004	14:11:14	900.55	107.49	11.26	6.52
5/20/2004	14:11:44	900.51	108.71	11.27	6.51
5/20/2004	14:12:14	904.93	108.03	11.26	6.51
5/20/2004	14:12:44	907.14	108.66	11.23	6.53
5/20/2004	14:13:14	911.46	109.30	11.23	6.56
5/20/2004	14:13:44	914.75	109.73	11.24	6.55
5/20/2004	14:14:14	914.44	110.74	11.23	6.55
5/20/2004	14:14:44	914.34	111.34	11.23	6.56
5/20/2004	14:15:14	916.69	112.81	11.22	6.57
5/20/2004	14:15:44	919.50	113.50	11.20	6.59
5/20/2004	14:16:14	925.11	112.55	11.22	6.59
5/20/2004	14:16:44	925.86	112.42	11.23	6.58
5/20/2004	14:17:14	925.39	112.52	11.21	6.60
5/20/2004	14:17:44	925.31	112.95	11.21	6.61
5/20/2004	14:18:14	926.71	115.22	11.22	6.61
5/20/2004	14:18:44	927.89	113.71	11.23	6.61
5/20/2004	14:19:14	929.90	111.79	11.22	6.61
5/20/2004	14:19:44	928.05	114.29	11.22	6.62
5/20/2004	14:20:14	926.66	113.21	11.23	6.62
5/20/2004	14:20:44	929.34	112.26	11.23	6.62
5/20/2004	14:21:14	928.64	113.18	11.23	6.62
5/20/2004	14:21:44	928.18	112.41	11.23	6.62
5/20/2004	14:22:14	927.44	112.25	11.22	6.63
5/20/2004	14:22:44	926.79	112.95	11.20	6.64
5/20/2004	14:23:14	927.44	113.37	11.20	6.65
5/20/2004	14:23:44	929.21	114.40	11.21	6.64
5/20/2004	14:24:14	929.62	111.54	11.22	6.64
5/20/2004	14:24:44	927.43	109.90	11.21	6.64
5/20/2004	14:25:14	926.95	113.68	11.20	6.65
5/20/2004	14:25:44	928.84	113.56	11.20	6.65
5/20/2004	14:26:14	928.77	112.36	11.19	6.65
5/20/2004	14:26:44	930.58	114.77	11.19	6.65
5/20/2004	14:27:14	932.25	114.66	11.19	6.64
5/20/2004	14:27:44	933.59	113.63	11.18	6.65
5/20/2004	14:28:14	933.62	115.21	11.20	6.64
5/20/2004	14:28:44	933.95	113.62	11.22	6.63
5/20/2004	14:29:14	933.08	110.43	11.24	6.61
5/20/2004	14:29:44	929.50	109.26	11.24	6.60
5/20/2004	14:30:14	929.00	108.88	11.24	6.60
5/20/2004	14:30:44	929.54	109.53	11.22	6.61
5/20/2004	14:31:14	930.88	110.65	11.22	6.61
5/20/2004	14:31:44	930.15	109.36	11.19	6.62
5/20/2004	14:32:14	933.55	113.21	11.17	6.64
5/20/2004	14:32:44	935.51	113.16	11.18	6.63
5/20/2004	14:33:14	939.33	113.60	11.16	6.64
5/20/2004	14:33:44	939.10	115.13	11.15	6.64
5/20/2004	14:34:14	937.65	114.73	11.15	6.64
5/20/2004	14:34:44	937.29	114.53	11.15	6.64
5/20/2004	14:35:14	936.69	115.15	11.16	6.63
5/20/2004	14:35:44	935.74	114.24	11.16	6.63
5/20/2004	14:36:14	935.56	114.29	11.16	6.62
5/20/2004	14:36:44	934.90	114.52	11.15	6.63
5/20/2004	14:37:14	934.81	114.84	11.15	6.63
5/20/2004	14:37:44	932.34	115.39	11.16	6.61

58.6 CO

BEGIN RUN 8 FULL LOAD

AVERAGES:

NOX	CO	O2	CO2
930.97	112.82	11.17	6.58

5/20/2004	14:38:14	933.54	115.30	11.16	6.61
5/20/2004	14:38:44	933.59	113.67	11.17	6.60
5/20/2004	14:39:14	933.13	113.46	11.18	6.59
5/20/2004	14:39:44	931.61	113.35	11.17	6.59
5/20/2004	14:40:14	933.21	111.91	11.15	6.60
5/20/2004	14:40:44	933.60	113.74	11.16	6.59
5/20/2004	14:41:14	932.32	116.05	11.15	6.59
5/20/2004	14:41:44	930.79	114.28	11.15	6.60
5/20/2004	14:42:14	930.16	113.47	11.15	6.59
5/20/2004	14:42:44	930.35	113.98	11.14	6.59
5/20/2004	14:43:14	933.15	115.44	11.13	6.61
5/20/2004	14:43:44	934.88	116.47	11.14	6.59
5/20/2004	14:44:14	936.06	116.00	11.13	6.59
5/20/2004	14:44:44	939.34	115.39	11.13	6.59
5/20/2004	14:45:14	940.84	115.39	11.12	6.59
5/20/2004	14:45:44	943.34	116.15	11.13	6.60
5/20/2004	14:46:14	941.53	115.61	11.13	6.58
5/20/2004	14:46:44	940.10	114.52	11.12	6.58
5/20/2004	14:47:14	943.94	114.89	11.13	6.58
5/20/2004	14:47:44	945.66	115.16	11.14	6.57
5/20/2004	14:48:14	944.00	112.52	11.15	6.56
5/20/2004	14:48:44	942.27	114.34	11.15	6.56
5/20/2004	14:49:14	941.53	114.95	11.15	6.55
5/20/2004	14:49:44	941.53	112.49	11.15	6.55
5/20/2004	14:50:14	938.22	112.88	11.15	6.55
5/20/2004	14:50:44	937.13	114.26	11.16	6.55
5/20/2004	14:51:14	937.64	110.74	11.16	6.54
5/20/2004	14:51:44	937.15	111.91	11.16	6.54
5/20/2004	14:52:14	935.75	113.31	11.16	6.54
5/20/2004	14:52:44	936.30	111.07	11.17	6.53
5/20/2004	14:53:14	937.61	110.91	11.18	6.52
5/20/2004	14:53:44	936.98	111.05	11.18	6.51
5/20/2004	14:54:14	934.47	109.49	11.16	6.52
5/20/2004	14:54:44	936.85	111.51	11.13	6.54
5/20/2004	14:55:14	938.34	113.45	11.14	6.55
5/20/2004	14:55:44	936.12	112.13	11.15	6.54
5/20/2004	14:56:14	935.49	113.59	11.13	6.55
5/20/2004	14:56:44	935.44	114.83	11.13	6.55
5/20/2004	14:57:14	935.88	114.18	11.14	6.55
5/20/2004	14:57:44	933.02	111.99	11.14	6.54
5/20/2004	14:58:14	932.17	114.17	11.13	6.55
5/20/2004	14:58:44	935.10	114.00	11.13	6.55
5/20/2004	14:59:14	935.02	112.73	11.13	6.55
5/20/2004	14:59:44	935.49	114.07	11.14	6.55
5/20/2004	15:00:14	935.20	113.45	11.15	6.55
5/20/2004	15:00:44	933.93	113.46	11.15	6.54
5/20/2004	15:01:14	934.44	112.14	11.16	6.54
5/20/2004	15:01:44	933.52	110.43	11.16	6.54
5/20/2004	15:02:14	933.55	110.66	11.15	6.54
5/20/2004	15:02:44	933.52	111.24	11.16	6.54
5/20/2004	15:03:14	932.94	111.02	11.15	6.55
5/20/2004	15:03:44	933.60	110.99	11.14	6.56
5/20/2004	15:04:14	933.99	113.09	11.14	6.55
5/20/2004	15:04:44	933.41	112.36	11.14	6.56
5/20/2004	15:05:14	932.94	110.49	11.13	6.57
5/20/2004	15:05:44	932.98	112.81	11.13	6.57
5/20/2004	15:06:14	933.24	114.01	11.13	6.57
5/20/2004	15:06:44	931.95	111.37	11.12	6.57
5/20/2004	15:07:14	934.00	112.39	11.12	6.58
5/20/2004	15:07:44	933.39	112.53	11.12	6.58
5/20/2004	15:08:14	932.47	113.74	11.14	6.58
5/20/2004	15:08:44	931.55	113.10	11.13	6.57
5/20/2004	15:09:14	929.68	113.64	11.13	6.57
5/20/2004	15:09:44	929.70	113.83	11.12	6.58
5/20/2004	15:10:14	931.23	112.53	11.12	6.58
5/20/2004	15:10:44	813.99	113.15	11.51	6.23
5/20/2004	15:11:14	181.12	105.49	2.37	1.27
5/20/2004	15:11:44	35.56	63.44	0.11	0.10
5/20/2004	15:12:14	24.89	52.48	0.00	0.07

05/20/2004	15:12:44	21.36	52.79	-0.01	0.07
05/20/2004	15:13:14	19.14	53.04	-0.01	0.07
05/20/2004	15:13:44	17.24	52.42	-0.02	0.07
05/20/2004	15:14:14	15.86	52.59	0.13	0.06
05/20/2004	15:14:44	13.86	47.27	10.14	2.29
05/20/2004	15:15:14	11.84	9.34	13.41	4.53
05/20/2004	15:15:44	11.24	-6.23	13.53	4.62
05/20/2004	15:16:14	9.65	-6.74	13.54	4.63
05/20/2004	15:16:44	9.65	-6.21	13.54	4.64
05/20/2004	15:17:14	8.77	-7.44	13.55	4.64
05/20/2004	15:17:44	7.76	-6.34	13.55	4.64
05/20/2004	15:18:14	243.31	-5.74	7.57	3.57
05/20/2004	15:18:44	772.35	-6.40	0.31	0.21
05/20/2004	15:19:14	817.96	-5.69	0.05	0.07
05/20/2004	15:19:44	819.17	-4.86	0.03	0.07
05/20/2004	15:20:14	819.16	-5.23	0.03	0.06
05/20/2004	15:20:44	819.13	-5.74	0.03	0.06
05/20/2004	15:21:14	819.18	-5.04	0.03	0.06
05/20/2004	15:21:44	818.48	-4.86	0.03	0.06
05/20/2004	15:22:14	496.08	-2.70	11.60	0.24
05/20/2004	15:22:44	231.58	201.06	16.91	2.02
05/20/2004	15:23:14	228.80	600.59	16.99	2.24
05/20/2004	15:23:44	251.04	647.89	16.24	2.38
05/20/2004	15:24:14	620.56	562.57	11.37	5.79
05/20/2004	15:24:44	794.16	268.42	11.00	6.73
05/20/2004	15:25:14	834.39	130.37	11.08	6.67
05/20/2004	15:25:44	857.81	110.80	11.12	6.64
05/20/2004	15:26:14	873.25	107.98	11.14	6.63
05/20/2004	15:26:44	885.70	108.82	11.13	6.63
05/20/2004	15:27:14	896.18	109.67	11.11	6.65
05/20/2004	15:27:44	905.08	110.17	11.11	6.67
05/20/2004	15:28:14	909.02	109.62	11.11	6.67
05/20/2004	15:28:44	910.47	110.22	11.11	6.67
05/20/2004	15:29:14	913.39	110.28	11.10	6.68
05/20/2004	15:29:44	916.14	111.60	11.09	6.69
05/20/2004	15:30:14	919.20	114.26	11.09	6.70
05/20/2004	15:30:44	920.45	114.53	11.11	6.69
05/20/2004	15:31:14	920.90	111.37	11.09	6.70
05/20/2004	15:31:44	921.36	114.28	11.08	6.72
05/20/2004	15:32:14	924.49	116.70	11.08	6.72
05/20/2004	15:32:44	924.04	115.18	11.09	6.72
05/20/2004	15:33:14	923.28	114.54	11.08	6.72
05/20/2004	15:33:44	923.29	116.15	11.07	6.73
05/20/2004	15:34:14	925.87	116.12	11.05	6.74
05/20/2004	15:34:44	927.75	116.18	11.05	6.75
05/20/2004	15:35:14	928.48	116.32	11.04	6.76
05/20/2004	15:35:44	930.73	117.03	11.04	6.76
05/20/2004	15:36:14	931.94	116.57	11.06	6.75
05/20/2004	15:36:44	931.58	115.26	11.06	6.75
05/20/2004	15:37:14	931.55	115.57	11.07	6.75
05/20/2004	15:37:44	929.81	115.44	11.07	6.75
05/20/2004	15:38:14	928.78	113.88	11.06	6.75
05/20/2004	15:38:44	931.52	115.30	11.06	6.75
05/20/2004	15:39:14	932.01	114.56	11.07	6.74
05/20/2004	15:39:44	933.33	112.52	11.09	6.73
05/20/2004	15:40:14	933.49	112.14	11.09	6.73
05/20/2004	15:40:44	932.51	112.78	11.09	6.73
05/20/2004	15:41:14	930.80	114.43	11.10	6.73
05/20/2004	15:41:44	931.52	113.66	11.08	6.73
05/20/2004	15:42:14	932.85	114.44	11.08	6.73
05/20/2004	15:42:44	933.30	115.11	11.07	6.73
05/20/2004	15:43:14	935.04	115.93	11.09	6.72
05/20/2004	15:43:44	934.44	114.52	11.08	6.72
05/20/2004	15:44:14	934.50	116.37	11.07	6.73
05/20/2004	15:44:44	931.64	116.54	11.06	6.73
05/20/2004	15:45:14	933.77	115.81	11.07	6.72
05/20/2004	15:45:44	934.65	113.67	11.08	6.71
05/20/2004	15:46:14	933.52	112.91	11.08	6.70
05/20/2004	15:46:44	933.80	114.37	11.09	6.70
05/20/2004	15:47:14	930.17	112.59	11.09	6.69

START RUN 9

AVERAGES:

NOX	CO	O2	CO2
922.18	113.32	11.07	6.69

05/20/2004	15:47:44	930.70	114.18	11.07	6.70
05/20/2004	15:48:14	931.14	114.11	11.08	6.70
05/20/2004	15:48:44	930.94	114.01	11.08	6.69
05/20/2004	15:49:14	931.51	112.05	11.08	6.69
05/20/2004	15:49:44	932.55	111.84	11.08	6.69
05/20/2004	15:50:14	932.82	112.14	11.09	6.68
05/20/2004	15:50:44	931.07	112.12	11.11	6.67
05/20/2004	15:51:14	930.26	110.99	11.11	6.65
05/20/2004	15:51:44	929.58	110.07	11.12	6.65
05/20/2004	15:52:14	927.54	109.15	11.11	6.65
05/20/2004	15:52:44	928.99	109.89	11.10	6.66
05/20/2004	15:53:14	929.60	109.91	11.10	6.66
05/20/2004	15:53:44	930.66	111.15	11.09	6.66
05/20/2004	15:54:14	931.51	112.17	11.08	6.67
05/20/2004	15:54:44	932.07	112.75	11.09	6.66
05/20/2004	15:55:14	931.29	111.06	11.08	6.67
05/20/2004	15:55:44	932.01	112.83	11.07	6.68
05/20/2004	15:56:14	931.10	114.00	11.08	6.67
05/20/2004	15:56:44	931.46	113.30	11.07	6.67
05/20/2004	15:57:14	930.90	111.37	11.06	6.68
05/20/2004	15:57:44	931.30	112.23	11.06	6.68
05/20/2004	15:58:14	933.46	113.36	11.08	6.67
05/20/2004	15:58:44	934.65	112.76	11.08	6.67
05/20/2004	15:59:14	931.84	110.89	11.06	6.67
05/20/2004	15:59:44	929.99	113.41	11.05	6.67
05/20/2004	16:00:14	931.27	114.91	11.06	6.68
05/20/2004	16:00:44	930.71	114.41	11.07	6.67
05/20/2004	16:01:14	932.43	113.77	11.07	6.66
05/20/2004	16:01:44	930.26	113.08	11.10	6.64
05/20/2004	16:02:14	929.32	110.92	11.10	6.64
05/20/2004	16:02:44	925.88	109.82	11.10	6.63
05/20/2004	16:03:14	925.65	109.76	11.10	6.64
05/20/2004	16:03:44	925.65	110.17	11.10	6.64
05/20/2004	16:04:14	926.92	111.15	11.09	6.64
05/20/2004	16:04:44	925.80	112.04	11.10	6.64
05/20/2004	16:05:14	924.17	110.27	11.10	6.63
05/20/2004	16:05:44	923.79	110.77	11.08	6.64
05/20/2004	16:06:14	925.29	112.37	11.07	6.65
05/20/2004	16:06:44	926.43	112.61	11.07	6.65
05/20/2004	16:07:14	925.34	112.60	11.05	6.66
05/20/2004	16:07:44	926.08	114.16	11.03	6.68
05/20/2004	16:08:14	925.34	115.02	11.03	6.68
05/20/2004	16:08:44	923.56	115.28	11.04	6.67
05/20/2004	16:09:14	924.08	114.57	11.05	6.67
05/20/2004	16:09:44	920.82	113.78	11.04	6.67
05/20/2004	16:10:14	917.59	115.01	11.04	6.67
05/20/2004	16:10:44	917.65	114.88	11.05	6.67
05/20/2004	16:11:14	919.22	113.33	11.06	6.67
05/20/2004	16:11:44	919.60	111.98	11.06	6.66
05/20/2004	16:12:14	918.79	111.42	11.06	6.67
05/20/2004	16:12:44	919.24	112.07	11.07	6.66
05/20/2004	16:13:14	917.27	112.84	11.08	6.65
05/20/2004	16:13:44	918.32	112.02	11.07	6.65
05/20/2004	16:14:14	922.24	112.01	11.06	6.67
05/20/2004	16:14:44	922.35	112.35	11.08	6.65
05/20/2004	16:15:14	920.91	111.02	11.06	6.66
05/20/2004	16:15:44	919.14	112.29	11.06	6.67
05/20/2004	16:16:14	917.85	111.33	11.05	6.67
05/20/2004	16:16:44	917.26	111.38	11.05	6.67
05/20/2004	16:17:14	915.37	111.66	11.05	6.67
05/20/2004	16:17:44	912.77	112.58	11.06	6.67
05/20/2004	16:18:14	909.12	112.04	11.04	6.68
05/20/2004	16:18:44	911.80	110.91	11.03	6.70
05/20/2004	16:19:14	913.15	114.45	11.03	6.70
05/20/2004	16:19:44	911.20	115.00	11.02	6.70
05/20/2004	16:20:14	910.46	115.29	11.01	6.71
05/20/2004	16:20:44	911.60	115.08	11.02	6.71
05/20/2004	16:21:14	910.90	113.82	11.01	6.70
05/20/2004	16:21:44	911.85	116.26	11.01	6.71
05/20/2004	16:22:14	908.60	115.24	11.02	6.70

05/20/2004	16:22:44	906.16	114.94	11.03	6.70
05/20/2004	16:23:14	903.04	113.20	11.03	6.69
05/20/2004	16:23:44	900.62	114.48	11.03	6.70
05/20/2004	16:24:14	899.30	115.16	11.04	6.69
05/20/2004	16:24:44	898.56	114.36	11.04	6.69
05/20/2004	16:25:14	895.91	113.03	11.05	6.68
05/20/2004	16:25:44	895.54	112.80	11.05	6.68
05/20/2004	16:26:14	893.05	112.05	11.06	6.68
05/20/2004	16:26:44	891.72	112.49	11.05	6.68
05/20/2004	16:27:14	892.12	112.20	11.05	6.68
05/20/2004	16:27:44	890.57	113.62	11.06	6.67
05/20/2004	16:28:14	891.54	113.30	11.05	6.67
05/20/2004	16:28:44	889.47	113.62	11.05	6.67
05/20/2004	16:29:14	888.16	113.30	11.06	6.67
05/20/2004	16:29:44	887.66	113.28	11.06	6.66
05/20/2004	16:30:14	886.08	112.01	11.06	6.65
05/20/2004	16:30:44	788.76	113.07	12.90	6.19
05/20/2004	16:31:14	303.46	251.94	16.81	2.71
05/20/2004	16:31:44	231.83	532.93	17.05	2.21
05/20/2004	16:32:14	230.61	601.69	17.04	2.20
05/20/2004	16:32:44	233.84	617.65	17.03	2.21
05/20/2004	16:33:14	235.23	624.10	17.02	2.22
05/20/2004	16:33:44	234.47	633.10	17.01	2.22
05/20/2004	16:34:14	233.81	640.35	17.00	2.23
05/20/2004	16:34:44	231.86	648.75	17.02	2.23
05/20/2004	16:35:14	220.40	656.81	17.12	2.16
05/20/2004	16:35:44	216.62	670.92	17.13	2.13
05/20/2004	16:36:14	215.11	678.65	17.12	2.14
05/20/2004	16:36:44	214.30	684.83	17.12	2.14
05/20/2004	16:37:14	212.62	688.15	17.12	2.14
05/20/2004	16:37:44	212.28	686.66	17.12	2.14
05/20/2004	16:38:14	210.79	688.32	17.12	2.14
05/20/2004	16:38:44	210.29	690.92	17.11	2.14
05/20/2004	16:39:14	210.30	693.10	17.11	2.15
05/20/2004	16:39:44	203.03	691.11	17.50	2.11
05/20/2004	16:40:14	64.64	527.73	19.91	0.57
05/20/2004	16:40:44	25.82	111.43	20.00	0.15
05/20/2004	16:41:14	21.71	40.67	20.15	0.16
05/20/2004	16:41:44	19.49	10.72	20.23	0.11
05/20/2004	16:42:14	17.71	-4.44	20.24	0.10
05/20/2004	16:42:44	16.83	-5.01	20.25	0.10
05/20/2004	16:43:14	15.82	-5.02	20.25	0.10
05/20/2004	16:43:44	32.14	-5.37	19.11	0.10
05/20/2004	16:44:14	591.51	-5.83	2.48	0.07
05/20/2004	16:44:44	808.38	-5.82	0.10	0.06
05/20/2004	16:45:14	809.42	-5.84	0.05	0.06
05/20/2004	16:45:44	809.46	-5.83	0.04	0.06
05/20/2004	16:46:14	810.93	-7.60	0.04	0.06
05/20/2004	16:46:44	811.00	-6.81	0.04	0.06
05/20/2004	16:47:14	811.00	-5.82	0.04	0.06
05/20/2004	16:47:44	810.97	-5.84	0.03	0.06
05/20/2004	16:48:14	488.91	-7.34	7.64	1.56
05/20/2004	16:48:44	29.20	-7.97	13.36	4.51
05/20/2004	16:49:14	8.44	-7.79	13.51	4.65
05/20/2004	16:49:44	7.74	-7.27	13.52	4.65
05/20/2004	16:50:14	7.76	-8.85	13.52	4.66
05/20/2004	16:50:44	6.07	-8.38	13.52	4.66
05/20/2004	16:51:14	5.70	-8.09	13.53	4.66
05/20/2004	16:51:44	5.71	-8.07	13.53	4.67
05/20/2004	16:52:14	5.73	-7.38	6.90	3.22
05/20/2004	16:52:44	5.82	24.62	0.17	0.15
05/20/2004	16:53:14	5.78	49.98	0.00	0.07
05/20/2004	16:53:44	5.78	51.29	-0.01	0.06
05/20/2004	16:54:14	5.47	50.25	-0.02	0.07
05/20/2004	16:54:44	3.84	51.09	-0.02	0.07

END RUN 9

ENGINE SHUT DOWN

AVERAGES:

NOx	CO	O2	CO2
221.02	654.59	17.10	2.17

END SHUT DOWN

BIAS CHECK



APPENDIX D

FIELD DATA SHEETS

**WDW DISC Building Generator
Emissions Test Data Collection Sheet**

Sheet 1 of 2

Data Sheet No.: 040518A

Continued on Sheet Number: 040518B

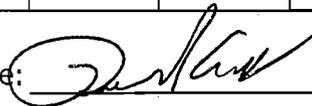
Engine Type: Detroit Diesel Model 1750DS-4, 4-cycle
 Engine Model No.: 16V4000 Engine ID: 527260177
 Engine ID: Men #3

Test Date: 5-18-04
 Fuel Oil Type: No. 2 Diesel
 Sulfur Content: <0.5%

Elapsed Run Time		Fuel Tank Level Data		RPM	Load (%)	Fuel Consumption (gal/hr)	MW	Amps	Cylinder Head Engine Temp.	Turbo Boost (psi)	Comments
Start Time	End Time	Gal. Start	Gal. End								
8:15		6872		1800	12	21.3	0	0	106	3.5	Normal Start up test
	8:30		6868	1800	10	19.3	0	0	150	3.4	4.5 gal used.
8:37		6868		1800	59%	75.6	.95	1200	175	17.6	Start at 13.0 gal.
	9:07			1800	59%	75.3	.95	1200	177	17.6	End at 85.6
	9:37			1800	59%	75.1			178	17.5	Used, 72.6 gal
9:55				1800	59%	74.9	.95	1200	177	17.5	Start 109.1
	10:25			1800	59%	75.1	.95	1200	178	17.3	End at: 184.9
	10:55			1800	59%	75.0	.95	1200	178	17.3	Used: 75.9
12:30				1800	59%	74.9	.95	1200	179	17.1	Start 302.7
	1:00			1800	59%	75.1	.95	1200	179	17.2	end at 377.9
	1:30		6513	1800	59%	75.1	.95	1200	179	17.1	Used: 75.2
12:32		6513		1800	75%	95	1.303	1583.3	182	24.1	Start at 407.8 gal
	2:22			1900	75%	95	1.303	1583.3	183	24.3	End at 502.6 gal
	2:52			1800	75%	95	1.303	1583.3	182	24.2	Used. 94.8

Data Collection Certification

Name: Rich Bumar, PE

Signature: 

Date: 5/20/04

Additional comments or observations

Visible emissions run at 10% consistent.
NE Cam 75% rpm 5-10%

**WDW DISC Building Generator
Emissions Test Data Collection Sheet**

Sheet 2 of 2

Data Sheet No.: 040518B

Engine Type: Detroit Diesel Model 1750DS-4, 4-cycle
 Engine Model No.: 16V4000 Engine ID: 5972001717
 Engine ID: Men # 3

Test Date: 5-18-04
 Fuel Oil Type: No. 2 Diesel
 Sulfur Content: < 0.5%

Continued on Sheet Number: NA

Elapsed Run Time		Fuel Tank Level Data		RPM	Load (%)	Fuel Consumption (gal/hr)	MW	Amps	Cylinder Head Engine Temp.	Turbo Boost (psi)	Comments
Start Time	End Time	Gal. Start	Gal. End								
3:17				1800	76	95	1.303	1583.3	182	24.1	Start at 540.9 gal
	3:47			1800	76	95	1.303	1583.3	182	24.2	End at 637.1 gal
	4:17			1800	76	95	1.303	1583.3	184	24.2	Used. 96.2
4:37				1800	76	95	1.303	1583.3	184	24.1	Start at 667.2 gal
	5:07			1800	76	95	1.303	1583.3	183	24.1	End at 764.0
	5:37		6137	1800	76	95	1.303	1583.3	184	24.1	Used. 96.8
5:55		6114		1800	10	18.3	⊖	⊖	176	2.4	Start at 790.9
	6:05		6110	1800	10	18.0	⊖	⊖	167	1.8	End at 794.0
											Used. 3.1 gal

Data Collection Certification

Name: Rich Bumar, PE

Signature: *Rich Bumar*

Date: 5/20/04

Additional comments or observations

Fuel tank level data taken from Veeder root.

WDW DISC Building Generator Emissions Test Data Collection Sheet

Engine Type: Detroit Diesel Model 1750DS-4, 4-cycle
 Engine Model No.: 16V4000 Engine ID: S272001717
 Engine ID: Men #3

Test Date: 5-19-04 & 5-20-04
 Fuel Oil Type: No. 2 Diesel
 Sulfur Content: _____

Data Sheet No.: _____
 Continued on Sheet Number: _____

Elapsed Run Time		Fuel Tank Level Data		RPM	Load (%)	Fuel Consumption (gal/hr)	MW	Amps	Cylinder Head Engine Temp.	Turbo Boost (psi)	Comments
Start Time	End Time	Gal. Start	Gal. End								
8:00		6110		1800	94	118.5	1.7	2016.6	139	31.9	Start at 794.0 gal
	8:15		6075	1800	91	113.3	⊖	⊖	182	31.9	end 823.5
12:43		5944		1800	90	109.9	1.662	2000	183	31.6	Start at 978.1
	1:13			1800	90	109.9	1.662	2000	184	31.6	end at 1096.8
	1:48			1800	90	109.7	1.662	2000	184	31.5	used. 118.7
2:10				1800	90	109.9	1.662	2000	182	31.5	Start at 1110.5
	2:40			1800	90	109.8	1.662	2000	186	31.4	end at 1221.5
	3:10			1800	90	109.9	1.662	2000	186	31.4	used 111
3:30				1800	90	109.9	1.662	2000	184	31.4	Start at 1241.0
	4:00			1800	90	109.9	1.662	2000	188	31.4	end at 1349.3
	4:30			1800	90	109.9	1.662	2000	187	31.4	used. 108.3
4:30				1800	10	18.4	⊖	⊖	187	31.4	Start at 1349.3
4:30	4:40		5588	1800	10	18.1	⊖	⊖	168	2.0	end at 1354.1
											used 4.8

5/19/04
 ↓ 5/20/04

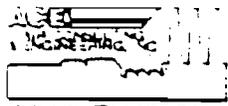
Data Collection Certification

Name: Rich Bumar, PE

Signature: _____

Date: _____

Additional comments or observations



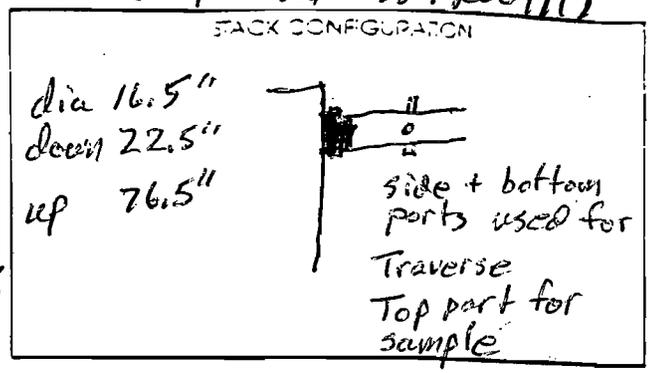
BEST AVAILABLE COPY

**DETERMINATION OF STACK GAS VELOCITY
& VOLUMETRIC FLOW RATE**

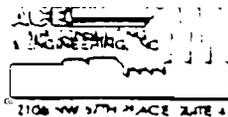
Detroit Model 175005-4 SN 5272001717

2106 NW 17TH PLACE, SUITE 4
SAVANNAH, GEORGIA 31243
704) 335-6800 OFFICE 704) 335-5911 FAX

PLANT Disney
SOURCE Diescl #3
DATE 5-18-04
STACK DIMENSIONS (in) 16.5 STACK AREA (FT²) 1.485
BAROMETRIC PRES. (in H₂O) 30.20 STATIC PRES. (in H₂O)
STACK PRES. (in H₂O) -1.0 OPERATORS CPS TF
PORT DIAM. 3" NIPPLE LENGTH 2"
PITOT TUBE NUMBER 52 TYPE 5
RUN NO. 1 TIME 0450 POST TEST (+) 6.7 / 6.2 (-) 7.5 / 7.5
RUN NO. 2 TIME 1045 POST TEST (+) 4.4 / 4.4 (-) 6.7 / 6.7
RUN NO. 3 TIME 1300 POST TEST (+) 7.1 / 7.1 (-) 4.9 / 4.9



TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F	DISTANCE FROM INSIDE STACK WALL	TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F
R-1 60% load	0.850			R-2 2-1	1.55	670
1-1	1.75	637		-2	1.60	673
-2	2.10	644		-3	1.70	679
-3	2.10	647		-4	1.90	684
-4	2.10	650		-5	1.60	689
-5	1.80	652		-6	1.30	692
-6	1.55	648		-7	1.00	671
-7	1.20	647		-8	1.20	671
-8	1.20	634				
2-1	1.60	640		R-3 60% load 1300		
-2	2.00	640		1-1	2.0	691
-3	2.20	646		-2	2.0	694
-4	2.25	651		-3	2.05	698
-5	1.80	657		-4	2.05	702
-6	2.00	660		-5	1.75	704
-7	1.50	657		-6	1.50	700
-8	1.45	640		-7	1.45	700
				-8	1.15	695
R-2 60% load 10:45				2-1	1.20	684
1-1	2.10	682		-2	1.75	685
-2	2.15	685		-3	1.90	693
-3	2.10	689		-4	1.90	701
-4	2.20	693		-5	1.90	705
-5	1.85	697		-6	1.50	704
-6	1.50	694		-7	1.45	697
-7	1.25	685		-8	1.45	691
-8	1.00	674				



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DETERMINATION OF STACK GAS VELOCITY & VOLUMETRIC FLOW RATE

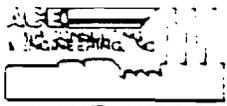
2108 NW 17TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32633
704) 335-1889 OFFICE 704) 332-1391 FAX

PLANT Disney World Wide Services
 SOURCE Diesel Engine No. 3
 DATE 5-18-04
 STACK DIMENSIONS (in) 16.5" dia STACK AREA (FT²) _____
 BAROMETRIC PRES. (in H₂O) 30.20 STATIC PRES. (in H₂O) _____
 STACK PRES. (in H₂O) -1.5" OPERATORS CPS TP
 PORT DIAM. 3 NIPPLE LENGTH 2
 PITOT TUBE NUMBER 52 TYPE S
 RUN NO. 4 TIME 1425 POST TEST (+) 3.3 / 3.3 (-) 4.2 / 4.2
 RUN NO. 5 TIME 1555 POST TEST (+) 5.1 / 5.1 (-) 4.9 / 4.9
 RUN NO. 6 TIME 1705 POST TEST (+) 5.4 / 5.4 (-) 7.0 / 7.0

STACK CONFIGURATION
 Run 4 1350 75% load
 Run 5 1517 75% load
 Run 6 1637 75% load
 ↑
 Run start times
 Not Traverse times

TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F	DISTANCE FROM INSIDE STACK WALL	TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F
R-4 75% LOAD		1425		2-1	2.60	743
1-1	2.70	740		-2	2.75	746
-2	2.80	743		-3	2.75	748
-3	3.00	746		-4	2.80	748
-4	3.20	748		-5	2.80	749
-5	2.60	750		-6	2.70	744
-6	2.20	748		-7	2.70	743
-7	2.00	744		-8	1.90	740
-8	1.80	739				
2-1	2.60	743		R-6 75% Load		1705
-2	2.75	743		1-1	3.0	746
-3	2.75	748		-2	2.95	747
-4	2.90	750		-3	3.00	748
-5	2.80	749		-4	3.15	750
-6	2.55	723		-5	2.70	750
-7	2.20	722		-6	2.75	748
-8	1.90	720		-7	2.00	746
R-5 75% load		1555		-8	1.50	740
1-1	2.70	748		2-1	2.15	742
-2	3.00	751		-2	2.75	743
-3	3.20	755		-3	2.75	747
-4	3.10	757		-4	2.85	751
-5	2.90	754		-5	2.90	751
-6	2.40	749		-6	2.70	749
-7	2.10	743		-7	2.55	745
-8	1.90	740		-8	2.50	740

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DETERMINATION OF STACK GAS VELOCITY & VOLUMETRIC FLOW RATE

1108 NW 57th PLACE SUITE 4
SANDWICH, FLORIDA 32081
704) 336-6899 OFFICE 704) 336-3911 FAX

PLANT Disney World Wide Services
 SOURCE Diesel No. 3
 DATE 5-19-04 5-20-04
 STACK DIMENSIONS (in) 16.5" Dia STACK AREA (FT²) _____
 BAROMETRIC PRES. (in H₂O) 30.12 STATIC PRES. (in H₂O) _____
 STACK PRES. (in H₂O) -2.4 OPERATORS LPS TF
 PORT DIAM. 3 NIPPLE LENGTH 3
 PITOT TUBE NUMBER 52 TYPE 5
 RUN NO. 7 TIME 1320 POST TEST (+) 4.9 / 4.9 (-) 5.2 / 5.2
 RUN NO. 8 TIME 1440 POST TEST (+) 5.5 / 5.5 (-) 4.0 / 4.0
 RUN NO. 9 TIME 1540 POST TEST (+) 3.7 / 3.7 (-) 5.1 / 5.1

STACK CONFIGURATION
 100% load
 R-7 1243
 R-8 1410
 R-9 1530

TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F	DISTANCE FROM INSIDE STACK WALL	TRAVERSE POINT NUMBER	VELOCITY HEAD (ΔPs) in H ₂ O	STACK GAS TEMPERATURE (Ts) F
Run 7	1320	753		Run 8		755
1-1	3.70	753		2-1	3.00	755
-2	4.00	755		-2	3.55	757
-3	4.00	756		-3	3.60	761
-4	4.00	758		-4	3.70	765
-5	3.65	759		-5	3.50	767
-6	3.10	757		-6	3.20	766
-7	3.40	754		-7	3.10	760
-8	2.70	750		-8	2.60	755
2-1	2.70	750				
-2	3.90	752		Run 9		
-3	3.70	752		1-1	3.60	760
-4	3.70	756		-2	3.55	760
-5	3.60	759		-3	3.80	762
-6	3.10	754		-4	3.90	763
-7	2.90	750		-5	3.50	761
-8	2.90	745		-6	3.20	760
				-7	2.50	758
Run 8				-8	2.40	755
1-1	3.50	758		2-1	2.70	753
-2	3.95	760		-2	3.50	755
-3	3.95	764		-3	3.60	760
-4	3.95	766		-4	3.60	763
-5	3.50	766		-5	3.50	767
-6	3.15	765		-6	2.60	766
-7	2.65	761		-7	2.85	752
-8	2.85	758		-8	2.65	750

PLANT Disney
 SOURCE Diesel No. 3
 PLANT LOCATION Lake Buena Vista
 TYPE OF SAMPLING TRAIN EPA 1-4
 TYPE OF SAMPLES H2O
 DATE 5/17/04 RUN NUMBER 2
 TIME START 1006 TIME END 1057
 SAMPLE TIME 5/12 (MIN/PT) = ~~50~~ ⁵⁰ TOTAL MIN
 ASSUMED MOISTURE(%) 6-8 FDA
 NOMOGRAPH Cf NA PITOT Cf NA
 Pb ('Hg) 30.20 Ps ('Hg) _____
 WEATHER clear TEMP (F) 80's
 METER BOX NO. 4 H 1.54 Y 9958
 NOZZLE IDENTIFICATION NO. NA
 NOZZLE CAL _____ / _____ = NA
 STACK DIMENSIONS 16.5 dia
 STACK AREA (FT2) 1.485 EFFECTIVE (FT2) 1.485
 STACK DIAMETERS:(UPSTREAM) 6.04 (DOWNSTREAM) 1.41
 PORT SIZE 3 NIPPLE LENGTH 2
 STACK HEIGHT (FT) ~75' UMBILICAL LENGTH 100
 AGENCY OBSERVER(S) _____
 TEST COORDINATOR(S) Jim McAllister
 V. E. OBSERVER _____



2106 NW 67TH PLACE SUITE 4
 GAINESVILLE, FLORIDA 32653
 (904) 335-1889 - OFFICE / (904) 335-1891 - FAX

STACK CONFIGURATION
 dia 16.5"
 down 22.5"
 up 76.5

1	1,528	start 0837 R-1
2	1,733	start R2 1003
3	3,201	start R3 1228
4	5,330	
5	11,171	
6	13,299	
7	14,768	
8	15,972	

REMARKS: _____

TEST ID H2O-1
 PAGE 1 OF 2

MATERIAL PROCESSING RATE 60% load
 GAS METER READINGS: FINAL 223.710 (FT3)
 INITIAL 188.700 (FT3)
 NET _____ (FT3)
 FILTER NO. NA IMP. VOL. GAIN 85 (ml)
 SILICA GEL NO. 8 WT. GAIN 9.2 (ml)
 TOTAL CONDENSATE _____ (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____
 LEAK CHECKS
 PRE 0.00 CFM 15 ('Hg) POST 0.00 CFM 10 ('Hg)
 METER BOX/PUMP GAS SYSTEM ORSAT BAG
 PITOT TUBE NO. NA PRE-TEST LEAK CHECK
 POST TEST (+) NA / NA 'H2O (15 SECONDS)
 POST TEST (-) NA / NA 'H2O (15 SECONDS)
 PYROMETER NUMBER Atk 4
 BOX OPERATOR CPS PROBE HOLDER TF

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ('H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ('Hg)
					CALC.	ACTUAL					
Single point		1007	192.4	NA		1.5	NA	NA	69	68	3
		1016	195.9			1.5			60	69	3
		1021	199.4			1.5			64	70	3
		1026	202.9			1.5			64	71	3
		1031	206.4			1.5			64	73	3
		1036	209.9			1.5			64	74	3

PLANT Disney World Wide Services
 SOURCE Diesel #3
 PLANT LOCATION Lake Buena Vista, FL
 TYPE OF SAMPLING TRAIN EPA 14
 TYPE OF SAMPLES H₂O
 DATE 5/18/04 RUN NUMBER 6
 TIME START 1638 TIME END _____
 SAMPLE TIME 5 / 12 (MIN/PT)= 60 TOTAL MIN _____
 ASSUMED MOISTURE(%) NA FDA NA
 NOMOGRAPH Cf NA PITOT Cf NA
 Pb ('Hg) 30.20 Ps ('Hg) 30.09
 WEATHER Clear TEMP (F) 80's
 METER BOX NO. 4 H 1.54 Y .9958
 NOZZLE IDENTIFICATION NO. NA
 NOZZLE CAL _____ = NA
 STACK DIMENSIONS 16.5" dia
 STACK AREA (FT²) 1485 EFFECTIVE (FT²) _____
 STACK DIAMETERS:(UPSTREAM) _____ (DOWNSTREAM) _____
 PORT SIZE _____ NIPPLE LENGTH _____
 STACK HEIGHT (FT) _____ UMBILICAL LENGTH _____
 AGENCY OBSERVER(S) _____
 TEST COORDINATOR(S) _____
 V. E. OBSERVER _____



2106 NW 67TH PLACE SUITE 4
 GAINESVILLE, FLORIDA 32653
 (904) 335-1889 - OFFICE / (904) 335-1891 - FAX

STACK CONFIGURATION
75% load

REMARKS: _____

TEST ID H2O-2
 PAGE 1 OF 2
 MATERIAL PROCESSING RATE 75% load
 GAS METER READINGS: FINAL 268,039 (FT3)
 INITIAL 224,700 (FT3)
 NET _____ (FT3)
 FILTER NO. NA IMP. VOL. GAIN 50 (ml)
 SILICA GEL NO. 600 WT. GAIN 13.6 (ml)
 TOTAL CONDENSATE _____ (ml)

ORSAT

	1	2	3	4	AVG.
%CO ₂					
%O ₂					
%CO					
%N ₂					

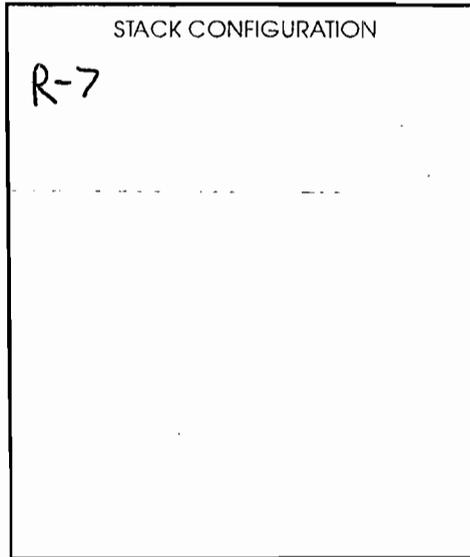
Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____
 LEAK CHECKS
 PRE 0.00 CFM 14 ('Hg) POST _____ CFM _____ ('Hg)
 METER BOX/PUMP GAS SYSTEM ORSAT BAG
 PITOT TUBE NO. PRE-TEST LEAK CHECK
 POST TEST (+) NA, NA 'H₂O (15 SECONDS)
 POST TEST (-) _____ 'H₂O (15 SECONDS)
 PYROMETER NUMBER ATK 4
 BOX OPERATOR CPS PROBE HOLDER JF

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ('H ₂ O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ('Hg)
					CALC.	ACTUAL					
		1643	228.3	NA	NA	1.5	NA	NA	68	84	5
		1648	231.9	↓	↓	1.5	↓	↓	67	85	5
		1653	235.5	↓	↓	1.5	↓	↓	68	85	5
		1658	239.0	↓	↓	1.5	↓	↓	68	86	5
		16 1703	242.6	↓	↓	1.5	↓	↓	67	87	5
		1708	246.1	↓	↓	1.5	↓	↓	67	88	5

PLANT Disney World Wide Services
 SOURCE Diesel No. 3
 PLANT LOCATION Lake Buena Vista, FL
 TYPE OF SAMPLING TRAIN EPA-4
 TYPE OF SAMPLES H₂O
 DATE 5/19/04 ~~5/20/04~~ RUN NUMBER H₂O-3
 TIME START 1243 TIME END _____
 SAMPLE TIME 5 / 12 (MIN/PT) = 60 TOTAL MIN
 ASSUMED MOISTURE(%) NA FDA NA
 NOMOGRAPH Cf NA PITOT Cf NA
 P_b ("Hg) 30.12 P_s ("Hg) _____
 WEATHER Broken TEMP (F) _____
 METER BOX NO. 4 H 1.54 Y _____
 NOZZLE IDENTIFICATION NO. NA
 NOZZLE CAL _____ / _____ / _____ = NA
 STACK DIMENSIONS 16.5" dia
 STACK AREA (FT²) 1.485 EFFECTIVE (FT²) 1.485
 STACK DIAMETERS:(UPSTREAM) 6 (DOWNSTREAM) 1.4
 PORT SIZE 3 NIPPLE LENGTH 3
 STACK HEIGHT (FT) ~15 UMBILICAL LENGTH 100
 AGENCY OBSERVER(S) _____
 TEST COORDINATOR(S) _____
 V. E. OBSERVER _____



2106 NW 67TH PLACE SUITE 4
 GAINESVILLE, FLORIDA 32653
 (904) 335-1889 - OFFICE / (904) 335-1891 - FAX



REMARKS: _____

TEST ID H₂O-3
 PAGE 1 OF 2
 MATERIAL PROCESSING RATE 100% load
 GAS METER READINGS: FINAL 310.650 (FT3)
 INITIAL 268.200 (FT3)
 NET _____ (FT3)
 FILTER NO. NA IMP. VOL. GAIN 55 (ml)
 SILICA GEL NO. 487 WT. GAIN 12.2 (ml)
 TOTAL CONDENSATE _____ (ml)

ORSAT	1	2	3	4	AVG.
%CO ₂					
%O ₂					
%CO					
%N ₂					

F_o = _____ F_o RANGE = _____ ORSAT ANALYZER _____
 LEAK CHECKS
 PRE 0.00 CFM 10 ("Hg) POST 0.00 CFM 9.5 ("Hg)
 METER BOX/PUMP GAS SYSTEM NA ORSAT BAG NA
 PITOT TUBE NO. 52 PRE-TEST LEAK CHECK
 POST TEST (+) NA / NA *H₂O (15 SECONDS)
 POST TEST (-) NA / NA *H₂O (15 SECONDS)
 PYROMETER NUMBER ATE4
 BOX OPERATOR CPS PROBE HOLDER TF

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ("H ₂ O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
	lost power point →	1248	271.7		NA	1.5	NA	NA	43	65	5
		1253	275.2			1.5			34	66	5
		1300	278.7			1.5			37	67	5
		1305	—			1.5			38	68	5
		1310	285.8			1.5			39	70	5
		1315	289.3			↓	1.5	↓	40	72	5

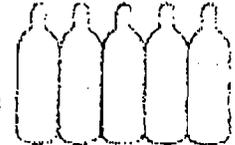
APPENDIX E

QUALITY ASSURANCE



SPECTRA GASES INC.

3434 Trade Dr West • Stoneham, MA 01980, USA Tel: (919) 552-3991 • (919) 552-0000 • Fax: (919) 552-0001
Sample from: 90 International Drive • Alpha • 0110806



CERTIFICATE OF ANALYSIS

EPA PROTOCOL MIXTURE PROCEDURE #: G1

CUSTOMER: Cherokee Instruments Inc.
SGI ORDER # : 0050903
ITEM# : 5
P.O.# : 6200

CYLINDER # : CC-19915
CYLINDER PRES: 2000 PSIG
CGA OUTLET: 660

CERTIFICATION DATE: 03/25/04
EXPIRATION DATE: 3/25/2006

CERTIFICATION HISTORY

COMPONENT	DATE OF ASSAY	MEAN CONCENTRATION	CERTIFIED CONCENTRATION	ANALYTICAL ACCURACY
Nitric Oxide	03/18/04	1243 ppm	1242 ppm	+/- 1%
NOx	03/25/04	1241 ppm	1245 ppm	Reference Value Only

BALANCE Nitrogen
PREVIOUS CERTIFICATION DATES: None

REFERENCE STANDARDS

COMPONENT	SRM/NTRM#	CYLINDER#	CONCENTRATION
Nitric Oxide	GMIS-1	CC-110060	2517 ppm

INSTRUMENTATION

COMPONENT	MAKE/MODEL	SERIAL #	DETECTOR	CALIBRATION DATE(S)
Nitric Oxide	Teco 10	10AR-34979-249	Cheml	03/11/04

THIS STANDARD IS NIST TRACEABLE. IT WAS CERTIFIED ACCORDING TO THE EPA PROTOCOL PROCEDURES.
DO NOT USE THIS STANDARD IF THE CYLINDER PRESSURE IS LESS THAN 150 PSIG.

ANALYST: FRED PIKULA

DATE: 03/25/04

ATTN: CHUCK
352-335-1891

Certificate of Analysis: E.P.A. Protocol Gas Mixture

Cylinder No :	<u>CC165081</u>	Order No.	<u>110606772</u>
Cylinder Pressure:	<u>2000PSIG</u>	Expiration Date:	<u>7/1/05</u>
Certification Date	<u>7/1/03</u>	Laboratory:	<u>ASG-MOBILE</u>
Part Number:	<u>E02NI99E15A0167</u>		

Reference Standard Information:

<u>Type</u>	<u>Component</u>	<u>Cyl. Number</u>	<u>Concentration</u>
GMIS	NITRIC OXIDE	ND17876	978 ppm

Instrumentation:

<u>Instrument/Model/Serial No.</u>	<u>Analytical Principle</u>
ECOPhysics/CLD700EL/72411	Chemiluminescence

Analytical Methodology does not require correction for analytical interferences.

Certified Concentrations:

Component	Concentration	Accuracy	Procedure
NITRIC OXIDE	446.5 PPM	+/-1%	G1
NOX	448.0 PPM		
NITROGEN	Balance		

Analytical Results:

<u>1st Component:</u>		<u>NITRIC OXIDE</u>			
1st Analysis Date: <u>6/23/03</u>					
R	<u>978.0</u>	S	<u>447.0</u>	Z	<u>0.0</u>
S	<u>447.0</u>	Z	<u>0.0</u>	R	<u>978.0</u>
Z	<u>0.0</u>	R	<u>978.0</u>	S	<u>447.0</u>
					Conc <u>447.0 ppm</u>
					Conc <u>447.0 ppm</u>
					Conc <u>447.0 ppm</u>
					AVG: <u>447.0 ppm</u>
2nd Analysis Date: <u>6/30/03</u>					
R	<u>978.0</u>	S	<u>446.0</u>	Z	<u>0.0</u>
S	<u>446.0</u>	Z	<u>0.0</u>	R	<u>978.0</u>
Z	<u>0.0</u>	R	<u>978.0</u>	S	<u>446.0</u>
					Conc <u>446.0 ppm</u>
					Conc <u>446.0 ppm</u>
					Conc <u>446.0 ppm</u>
					AVG: <u>446.0 ppm</u>

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed.

Do not use cylinder below 150 psig.

Carol Stewart
Approved for Release

Certificate of Analysis: EPA Protocol Gas Mixture

Airgas Specialty Gases
5480 Hamilton Blvd.
Theodore, AL 36582
(251) 653-2500 Fax: (251) 653-2530
www.airgas.com

Cylinder Number: SG9128443 Reference Number: 47-124019070-8
Cylinder Pressure: 2013.3 PSIG Expiration Date: 5/4/2006
Certification Date: 5/4/2004 Laboratory: W04 - 124

Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
NITRIC OXIDE	854.0 PPM	+/- 1%	CHEMILLUM	G1
NITROGEN	Balance			

Total oxides of nitrogen 854 PPM

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

Notes: Airgas PO 110681215
Airgas Lot # 47-040414/2266

Do not use cylinder below 150 psig.

Approval Signature

Carol Stewart

Reference Standard Information

Type	Component	Cyl. Number	Concentration
NTRM 1040408	NITRIC OXIDE	CC76680	959.0 PPM
NTRM 50215	NITRIC OXIDE	SG9159616	959.0 PPM

Analytical Results

1st Component		NITRIC OXIDE	
1st Analysis Date: 04/20/2004			
R 959.0	S 852.0	Z 0.000	Conc 852.0 PPM
S 852.0	Z 0.000	R 959.0	Conc 852.0 PPM
Z 0.000	R 959.0	S 852.0	Conc 852.0 PPM
AVG: 852.0 PPM			
2nd Analysis Date: 05/04/2004			
R 959.0	S 856.0	Z 0.000	Conc 856.0 PPM
S 856.0	Z 0.000	R 959.0	Conc 856.0 PPM
Z 0.000	R 959.0	S 856.0	Conc 856.0 PPM
AVG: 856 PPM			

MT

CERTIFICATE OF ANALYSIS

Date: 03/07/2002

Reference Number: 21-100606

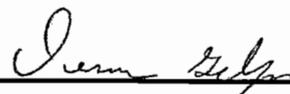
Customer Name: Ocala - Airgas South

Grade Of Product: Certified Standard Gas Mixture

<u>Cylinder Number</u>	<u>Component</u>	<u>Requested Concentration</u>	<u>Actual Concentration</u>
CC121996	Carbon Monoxide	60.00 PPM	58.60 PPM
	Nitrogen	Balance	Balance

Note:

Relative Uncertainty of Analytical Value: 2 %


Approval Signature

Airgas

Airgas Specialty Gases
5480 Hamilton Blvd.
Theodore, AL 36582

P.O. Box 190969
Mobile, AL 36619
(251) 653-2500 Fax: (251) 653-2530
<http://www.airgas.com>

CERTIFICATE OF ANALYSIS

Date: November 13, 2002

Reference number: 021112/5731

Customer Name: Airgas South
Address: Ocala, FL

Purchase Order: 555734
X02NI99C15AJ468

Grade of Product: Certified Gas Standard ($\pm 2\%$)
Cylinder Number: CC42815
Cylinder Pressure: 2000 psia
Cylinder Contents: 142 scf
Expiration Date: 11/13/03

<u>Components</u>	<u>Requested Concentration</u> (mole %)	<u>Actual Concentration</u> (mole %)
Carbon Monoxide	350 ppm	357 ppm
Nitrogen	Balance	Balance

Coral Stewart
Approval Signature

This mixture is made to a pressure such that the dewpoint of condensable gases is below zero degrees Centigrade.

The accuracy of each scale used to manufacture this blend is checked before use by means of NIST traceable weights Troemner serial numbers 4828, 8736, 8028, 8593, 8592 and 8056.

Certificate of Analysis EPA Protocol Gas Mixture

Cylinder No:	CC174001	Reference Number:	47-73415100-004
Cylinder Pressure:	2,013 psig	Expiration Date:	01/12/2007
Certification Date:	01/12/2004	Laboratory:	ASG - Mobile

Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
Carbon Dioxide	4.987%	±/ 1%	TCD	G1
Oxygen	13.92%	±/ 1%	PARAMAGN	G1
Nitrogen	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

Notes: AIRGAS PO 110648089 AIRGAS LOT # 47-031216/7250

Do not use cylinder below 150 psig.


 Approved for Release

Reference Standard Information

Type	Component	Cyl. Number	Concentration
NTRM 82659	Oxygen	SG9163000	20.98 PERCENT
NTRM 81675	Carbon Dioxide	SG9169303	13.84 PERCENT

Analytical Results

1st Component							2nd Component								
Carbon Dioxide							Oxygen								
1st Analysis Date: 01/12/2004							1st Analysis Date: 01/12/2004								
R	59,896	S	43,158	Z	0.0000	Conc	4.985%	R	20.98	S	13.92	Z	0.0000	Conc	13.92%
S	43,180	Z	0.0000	R	59,902	Conc	4.987%	S	13.92	Z	0.0000	R	20.98	Conc	13.92%
Z	0.0000	R	59,909	S	43,205	Conc	4.989%	Z	0.0000	R	20.98	S	13.92	Conc	13.92%
AVG: 4.987%							AVG: 13.92%								

Certificate of Analysis EPA Protocol Gas Mixture

Cylinder No:	CC94108	Reference Number:	47-ST1231-000
Cylinder Pressure:	2,013 psig	Expiration Date:	03/08/2007
Certification Date:	03/08/2004	Laboratory:	ASG - Mobile

Certified Concentrations

Component	Concentration	Accuracy	Analytical Principle	Procedure
Oxygen	5.990 %	± 1%	PARAMAGNET	G1
Carbon Dioxide	15.01 %	± 1%	TCD	G1
Nitrogen	Balance			

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences.

Notes: Airgas PO 110668187 Airgas Lot # 47-040226/1313

Do not use cylinder below 150 psig.


 Approved for Release

Reference Standard Information

Type	Component	Cyl. Number	Concentration
NTRM	Carbon Dioxide	SG9169303	13.84 PERCENT
NTRM	Oxygen	SG9163062	9.510 PERCENT

Analytical Results

1st Component

Oxygen

1st Analysis Date:		03/08/2004	
R	9.510	S	5.990
S	5.990	Z	0.0000
Z	0.0000	R	9.510
		S	5.990
		Conc	5.990 %
		Conc	5.990 %
		Conc	5.990 %
		AVG:	5.990 %

2nd Component

Carbon Dioxide

1st Analysis Date:		03/08/2004	
R	58,750	S	63,785
S	63,649	Z	0.0000
Z	0.0000	R	58,681
		S	63,541
		Conc	15.02 %
		Conc	15.01 %
		Conc	14.99 %
		AVG:	15.01 %

APPENDIX F

FUEL ANALYSES



SUMMIT

ENVIRONMENTAL TECHNOLOGIES, INC.
Analytical Laboratories

May 26, 2004

1/1

Client: Air Consulting and Engineering
Address: 2106 NW 67 PJ Ste4
Gainesville, FL 32653

Date Collected: 5/19/2004
Date Received: 5/25/2004
Project #: Disney Worldwide Service
Client ID #: 525-04-01-FO
Laboratory ID #: 043672-01
Matrix: Liquid

<u>Parameter</u>	<u>Method</u>	<u>Results</u>	<u>Date of Analysis</u>
% Water	ASTM D95	<0.33%	5/26/2004
Ash	D482-02	<0.1%	5/26/2004
BTU/gal	D-240-76	137416/gal	5/26/2004
BTU/lb	D-240-76	19442/lb	5/26/2004
Sulfur, Wt%	D-4294	0.0362%	5/25/2004

Laboratory Manager: 



Summit Environmental Technologies, Inc.
 595 East Tallmadge Avenue
 Akron, Ohio 44310 Tel: 330.253.8211 Fax: 330.253.4489

Analysis Request/Chain of Custody

For Summit Environmental Technologies, Inc. use only

Page 1 of 1

SBT No.

Client Name <i>Air Consulting and Engineering</i>		Project Name <i>Disney Worldwide Service</i>		Grab	Composite	Matrix: S=Solid, L=Liquid, O=Oil SL=Sludge, A=Air	Preservative	Analytical Parameters and Methods						
Client Address <i>2106 NW 67 PL Ste 4 Gainesville, FL 32653</i>		Project Address						Number of Containers <i>BTU (Gallon + Pound) 5 Water (distillation) Ash</i>						
Client Phone No. <i>352 335 1889</i>		Report to												
Client Fax No. <input checked="" type="checkbox"/> <i>Please Fax Results</i> <i>352 335 1891</i>		PO #												
Contact Person <i>Chuck Sneeringer</i>		Quote No.												
Sampled by <i>CPS</i>		Check if Ohio VAP samples <input type="checkbox"/>												

	Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix	Preservative	Number of Containers				
1	525-04-01-FO	5/19/04	11:10 AM	<input checked="" type="checkbox"/>		O	NA	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>043672-01</i>												

Relinquished by: <i>C.P. Sneeringer</i>	Date: <i>5/24/04</i>	Time: <i>10:00</i>	Received by:	Date:	Time:
Received in lab by: <i>[Signature]</i>	Date: <i>5/25/04</i>	Time: <i>10:30</i>	Rush Requested: <input type="checkbox"/>	Days	Must be approved by lab manager

Notes/Comments: *Need results by Wednesday PM
Report results in terms of gallons and pounds*

White and yellow pages should accompany samples to the laboratory. The client retains the pink page.

PAGE 01
 May. 24 2004 08:43AM P1
 SUMMIT ENV TECH
 FAX NO. : 6157949437
 3302534489
 05/26/2004 15:50
 SUMMIT ENV TECH

APPENDIX G

PROJECT PARTICIPANTS

PROJECT PARTICIPANTS

Air Consulting and Engineering, Inc.

Charles P. Sneeringer
Field Testing
Report Preparation

Todd Fraser
Field Testing

Gloria Gagich
Document Production

Disney Worldwide Services, Inc.

Rich Bumar, P.E.
Jim McAlister
Test Coordinators

Grove Scientific & Engineering Company

Bruno Ferraro
Test Coordinator