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Air/Toxics & Inspecti
Coordination Branch
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Chesapeake ENERGY

Regulatory Department

March 1, 2010

VIA CERTIFIED MAIL # 7009 0960 0000 6543 9824

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

Re: 30 TAC § 117 Results of Performance Testing
Texas Midstream Gas Services (TMGS)
Apollo Compressor Station – RN105076640

To Whom It May Concern:

Per 30 TAC § 117.2135(d)(9), TMGS is submitting the results of performance testing for unit MC1661, an affected facility as defined by 30 TAC § 117. The test report is enclosed. As indicated by the initial performance test the new control equipment still needed adjustment. The appropriate changes have been made to the control equipment and this will be demonstrated in a test scheduled for March 15, 2010. If you have any questions, please contact me at (405) 935-6113 or by email at hillary.moseley@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
EHS Coordinator
Chesapeake Energy

Enclosure: Test Report

cc: Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
12100 Park 35 Circle, Building C
Austin, Texas 78753
VIA CERTIFIED MAIL # 7009 0960 0000 6543 9862

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, TX 76118-6951
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Field Operations Support Division (FOSP)
TCEQ, MC-174
12100 Park Circle, Building A
Austin, TX 78753
VIA CERTIFIED MAIL # 7009 0960 0000 6543 9831

MidCon COMPRESSION

Emissions Testing

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EMISSIONS TEST REPORT

EPA 40CFR60 App. A Methods 3A, 7E, 10 and 19
OXIDES OF NITROGEN and CARBON MONOXIDE
EMISSION RESULTS

AT
Apollo Compressor Station
Johnson County, Texas
for
Texas Midstream Gas Services

EMISSION SOURCE
Caterpillar G-3516-LE
1340-HP
Unit MC1661
S/N WPW00331

TEST DATE
01/25/10

PREPARED BY
Jeff Anderson

MC_ET#103016

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A - Calculations
B - Raw Field Data and Calibration Data Sheets
C - Sampling Log and Chain-of-Custody Records
D - Analytical Data Sheets
E - List of Participants
F - Additional Information

1.0 INTRODUCTION

1.1 SUMMARY OF TEST PROGRAM

MidCon LLC Emissions Testing Department conducted source emissions testing for Texas Midstream Gas Services at the Apollo Compressor Station in fulfillment of the performance test requirements of 30 TAC § 117 and 30 TAC § 106 and to demonstrate compliance with applicable permit emissions limits. The engine is authorized to operate under PBR 80041 Table 1 presents the emission units and emission species measured during the testing along with emission limits. The test was conducted in accordance with approved Environmental Protection Agency (EPA) test methods as described in the Code of Federal Regulations, Title 40 and Part 60 - Appendix A. The test date was January 25, 2010.

This report has been reviewed and to the best of my knowledge and belief, the information submitted, respectively, is true, accurate, and complete.

Jeff Anderson

Digitally signed by Jeff Anderson
Reason: I attest to the accuracy
and integrity of this document
Location: MidCon Compression
Date: 2010.02.26 11:40:53 -06'00'

Jeff Anderson
MidCon LLC
410 Marti Dr.
Cleburne, TX. 76033
(817) 556-2462

Table 1: Emissions Units and Requirements

Unit Type	Emission Species	Applicable Limits
Caterpillar G-3516-LE Natural Gas Fired Engine Serial #WPW00331	NO_x	*0.7 g/bhp/hr **1.5 g/bhp/hr
	CO	**1.9 g/bhp/hr
*30 TAC § 117 **PBR Limits		

Facility:

Texas Midstream Gas Services
Apollo Compressor Station
Johnson County, Texas

Contact:

Hillary Moseley
Chesapeake Energy Corporation
PO Box 18469 Oklahoma City
OK 73154-0162
405-935-6113

Emission Test Company:

MidCon LLC
Emission Testing
410 Marti Dr.
Cleburne, Texas 76033

Contact:

Jeff Anderson
Lab 124
(817)556-2462

2.0 SOURCE AND SAMPLING LOCATION DESCRIPTIONS

2.1 PROCESS DESCRIPTION

The Apollo Compressor Station is used to boost the pressure of sweet natural gas to a natural gas transportation system. Sweet natural gas from the inlet separator is compressed by four compressor engines. Compressor discharge exits the station.

2.2 CONTROL EQUIPMENT DESCRIPTION

This source is equipped with an Air to Fuel Ratio Controller and Catalyst reduction.

2.3 EXHAUST GAS AND PROCESS SAMPLING LOCATIONS

Emission sampling locations were located near the final exhaust. A stratification check utilizing NOx was performed during Run 1. The concentration at each traverse point differed from the mean concentration of all traverse points by no more than 5 percent. For the remainder of the test runs, sampling was performed at the centroid of the stack.

The fuel sample was taken near the fuel meter run. The fuel is analyzed periodically at this location and results of the test sample were compared to previous samples for consistency. Published OEM fuel curves were used to determine fuel rates. The OEM publication is included in appendix F of this report.

The process parameters are monitored at the unit's control board. Production rates and quality are monitored at the stations final discharge meter. Pipeline gases are analyzed periodically by chromatograph for quality. Parameters pertaining to the sources process are included in Table 3-2.

3.0 SUMMARY AND DISCUSSION OF TEST RESULTS

3.1 OBJECTIVES AND TEST MATRIX

The test of MC1661 fulfills the performance test requirements of 30 TAC § 117 and 30 TAC § 106. The engine is authorized to operate under PBR 80041. The specific objectives are:

- Measure simultaneously the emissions of Oxygen, Carbon Monoxide and Oxides of Nitrogen at the exhaust stack of the natural gas source per the guidelines located in 40 CFR Pt. 60, Appendix A
- During the test period, obtain production rates, fuel rates and load indicating operating parameters.
- Obtain fuel chemistry.

Table 3-1 presents the sampling and analytical matrix.

TABLE 3-1. Apollo Compressor Station TEST MATRIX

Sampling Location	No. Of Runs	Sample/Type Pollutant[a]	Sampling Method[b]	Sampling Org	Sample Run Time (min)	Analytical Method[c]	Analytical Laboratory
Caterpillar G-3516-LE STACK 01/25/10	3	O_2/CO/NOx	M7E M19	MidCon	60	M3A NDIR (M10) M7E	Lab 124

[b] M - EPA Method, CEM - EPA Instrumental Method using continuous emission monitors.
[c] NDIR - Nondispersive infrared, FID - flame ionization detector, GC - gas chromatograph, HPLC - high performance liquid chromatography.

3.2 FIELD TEST CHANGES AND PROBLEMS

No problems occurred during the testing of this source.

3.3 PRESENTATION OF RESULTS

3.3.1 RESULTS

Table 3-2 shows the resulting values for the test matrix. This table includes process data and times. For raw data or data for individual test points, please see Appendix B.

Method / Component	Units	Run 1	RUN 2	RUN 3	AVG
Time	Start End	10:00 AM 11:01 AM	11:11 AM 12:12 PM	12:23 PM 1:31 PM	
Method 3a O^2	% Percent	8.51	8.76	8.78	8.68
Method 7E NO_X	ppmvd	165.39	162.14	168.26	165.26
	gr/bhp/hr	1.10	1.10	1.15	**1.12**
Method 10 CO	ppmvd	18.10	26.21	27.15	23.82
	gr/bhp/hr	0.07	0.11	0.11	**0.10**
Process Paramaters					
Load	BHP	1020	1020	1020	1020
Load *	%	76.12%	76.12%	76.12%	76.12%
Speed	RPM	1300	1300	1300	1300
Manifold Pressure	PSIA	27.9	32.5	32.4	31
Fuel Consumption	SCFH	8660	8660	8660	8660
Fuel Consumption (BSFC)	BTU(LHV)	7668	7668	7668	7668
Compressor Suction Pressure	PSI	120	150	160	143.33
Compressor Discharge Pressure	PSI	900	900	900	900.00
Compressor Volume	MMSCFD	10	10	10	10.00
Ambient Temperature	Deg. F	44.00	44.00	44.00	44.00
Ambient Pressure	In. Hg.	29.13	29.13	29.13	29.13

* as compared to maximum rated horsepower

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 EMISSIONS TEST METHODS

Sampling and analysis of the emission sources followed procedures outlined in the Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 3A, 7E, 10 and 19. Instrumental analyzers collected stack gas analyses for oxides of nitrogen, carbon monoxide and oxygen. Technical specifications and detection principles of these analyzers are listed on **Table 4** of this report.

The sampling and analysis system used during the test are shown on Figure 4. Stack gas travels to the analytical equipment via a 3/8" stainless steel probe through the three way Bias gas/sample valve (stainless steel) and enters a heated sample line where the sample gas is conducted through a 3/8" Teflon tubing. The heated sample line maintains the sample gas temperature above 230° F. From the heated sample line, the sample gas is directed to a sample conditioner where water is condensed from the sample gas. From the sample conditioner, the sample gas enters the analyzers where the emission concentrations are measured on a dry basis. These concentrations are also recorded using an onboard data acquisition system, which provides documentation of emission measurements and instrument responses.

The test equipment used for this test series is laboratory grade instrumentation, which meets or exceeds all requirements of 40CFR60 test methods (**see table 4**). The test procedure and instrumentation materially complies with 40CFR60 Appendix A, Methods 3A, 7E, 10 and 19 practices adapted for use on internal combustion engines and turbines.

The exhaust gases were sampled continuously to determine NO_x, CO and O_2 concentrations for three runs at the unit's maximum achievable load at the time of the test. The maximum possible load was dependant on ambient and well conditions available during the test.

Fuel use for the source was determined by manufacturer published fuel curves.

Horsepower outputs were derived from engineering formulas. Engine and compressor parameters were entered into performance software commonly used in the gas industry. A printout of the initial test run is also included in appendix F.

The data acquisition system scanned the analyzers multiple times per second during the test run. The computer averaged the outputs every minute. This raw data is included in the APPENDICES.

TABLE 4

MidCon LLC
Cleburne, Texas (817)-556-2462
MOBILE EMISSIONS LAB
EQUIPMENT SPECIFICATIONS
- SPECIFICATIONS SHOWN DENOTE MAXIMUM DEVIATIONS-

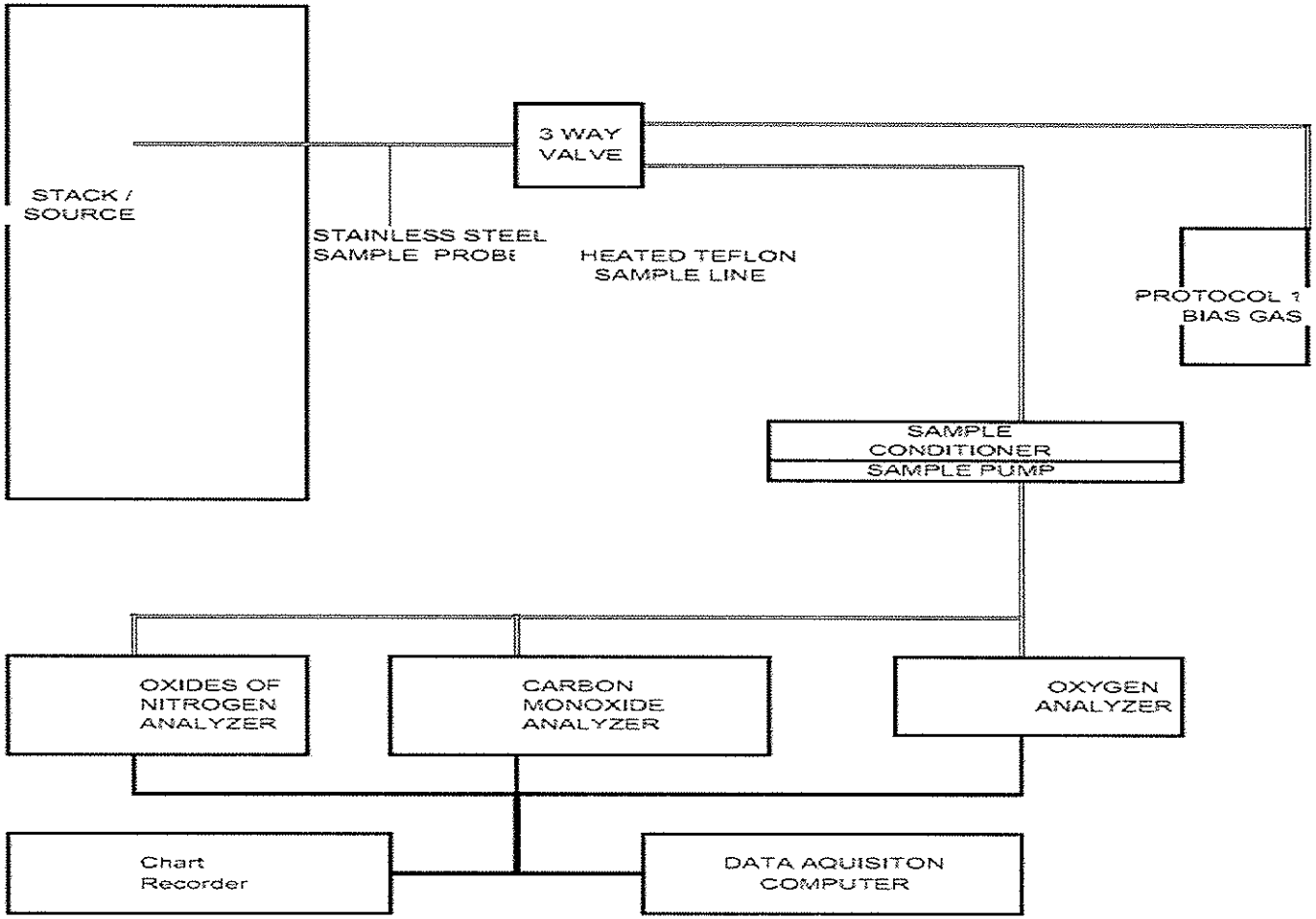
California Analytical ANALYZER	RANGE, min/max (1)	SENSITIVITY	LINEARITY	ACCURACY	RESPONSE TIME (instr)	INTERFR. RESP.
OXYGEN #602	0-1% --> 0-25%	<0.5% FS	< 1% see curves	±2% FS	90% -30 sec	< 1%
NOx #600 CLD	0-10 ppm --> 0-10 kppm	<1% LR	<1% Rng. see curves	±1%FS	90% - 1 sec	< 1%
CO #602	0-1.25 kppm --> 0-5 kppm (2)	<1% LR	±2% FS see curves	±2% FS	90% - 5 sec	CO2 Rej > 2500:1(5)

Note 1. Ranges may be electronically attenuated to provide specific custom ranges for particular applications.

Note 2. CO high range may be extended to approx. 0 - 20 kppm using background zero gas dilution flows.

Note 3. Sample conditioning system assures dry sample - dew point < -70°F, H2O Rejection Ratio N/A

Figure 4 - Sample Schematic



4.2 PROCESS TEST METHODS

Engine and compressor data were taken from the stations control panel. Multiple points were averaged for each test. Ambient conditions were recorded on the test trailer data acquisition computer. The fuel sample was taken prior to the test date.

4.3 SAMPLE IDENTIFICATION AND CUSTODY

For this test series all samples were processed real time and do not require a chain of custody. All tests were sequential and files numbered accordingly. Data points include time and date stamps.

5.0 QA/QC ACTIVITIES

5.1 QA/QC System Checks

Analyzer calibration data can be found in Appendix B.
Calibration Gas analysis can be found in Appendix D.
An OEM fuel curve may be found in Appendix F.

Sample line Leak Check

Condenser Drained	X
Inlet Temp	253
Outlet Temp	45
Start Vacuum	-11
End Vacuum	-11
Duration(secs)	60

Response Time

Date : 1/25/2010

Upscale Gas Concentrations		Analyzer Span Settings	
NO	124	NO	241
CO	124	CO	240

UPSCALE : Seconds

	NOx	CO
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
Avg upscale Time :	< 1 minute	< 1 minute

DOWNSCALE : Seconds

	NOx	CO
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
Avg downscale Time :	< 1 minute	< 1 minute

Date: 1/25/10

NOx Converter Check Data

NO Calibration Gas Value 124 NO2 Calibration Gas Value 49.2

Instrument Readings
NOx, ppmv
(3 minute averages)

	Pre Cal	Converter Check
Zero	0.36	
NO cal	126.87	
Test NOx mode		48.06
NO2 Observed		47.70
Percent Efficiency		94.76%

Percent Eff = corrected Test NOx mode reading / NO2 Value
(MINIMUM = 90%)

5.2 QA AUDITS

Analyzers were calibrated and checked with EPA Protocol 1 calibration gases.
No captured samples will be collected for this test series and no other sample audits are required.

APPENDICES

Appendix A

Calculations

PPMVD CORRECTIONS
(40CFR60APP.A,7e.11 Equation 7e-5)

Cgas	=	Effluent gas concentration, dry basis PPM / %
C	=	Average gas concentration indicateed by analyzer, dry basis PPM / %
Co	=	Average of initial and final system calibration bias check responses for the zero gas, PPM / %
Cm	=	Average of initial and final sytem calibration bias check responses for the upscale calibration gas, PPM / %
Cma	=	Actual concentration of the upscale calibration gas PPM / %

$$Cgas = \frac{C - Co}{\frac{Cma}{Cm - Co}}$$

	C NOx	C CO	C O2	Co NOx	Co CO	Co O2	Cm NOx	Cm CO	Cm O2
RUN 1	160.01	11.92	8.604	0.6	-6.935	0.03	120.12	122.215	12.52
RUN 2	155.96	21.57	8.894	0.78	-6.12	0.035	119.46	124.875	12.58
RUN 3	163.76	24.61	8.936	0.95	-4.295	0.04	120.935	127.735	12.6

Cma Nox 124 PPM Cma CO 124 PPM Cma O2 12.40

RUN 1

$$Cgas\ NOx = \frac{160.01 - 0.6}{\frac{124}{120.12 - 0.6}} = 165.39 \text{ PPM}$$

$$Cgas\ CO = \frac{11.92 - -6.935}{\frac{124}{122.215 - -6.935}} = 18.10 \text{ PPM}$$

$$Cgas\ O2 = \frac{8.604 - 0.03}{\frac{12.4}{12.52 - 0.03}} = 8.51 \%$$

RUN 2

$$Cgas\ NOx = \frac{155.96 - 0.78}{\frac{124}{119.46 - 0.78}} = 162.14 \text{ PPM}$$

$$Cgas\ CO = \frac{21.57 - -6.12}{\frac{124}{124.875 - -6.12}} = 26.21 \text{ PPM}$$

$$Cgas\ O2 = \frac{8.894 - 0.035}{\frac{12.4}{12.58 - 0.035}} = 8.76 \%$$

RUN 3

$$Cgas\ NOx = \frac{163.76 - 0.95}{\frac{124}{120.935 - 0.95}} = 168.26 \text{ PPM}$$

$$Cgas\ CO = \frac{24.61 - -4.295}{\frac{124}{127.735 - -4.295}} = 27.15 \text{ PPM}$$

$$Cgas\ O2 = \frac{8.936 - 0.04}{\frac{12.4}{12.6 - 0.04}} = 8.78 \%$$

EPA Method 19 O2 "F" Factor Dry Basis Calculations Per Fuel Gas Analysis

(40CFR60APP.A,Meth.19 Equation 19-13)

O2Fd	=	O2 F factor (dry) SCF/million BTU
K	=	Conversion factor (1,000,000 BTU)
Khd	=	3.64 SCF of exhaust / lb of hydrogen burned / (% hydrogen)
Kc	=	1.53 SCF of exhaust / lb of carbon burned / (% carbon)
Ks	=	0.57 SCF of exhaust / lb of sulphur burned / (% sulphur)
Kn	=	0.14 SCF of exhaust / lb of nitrogen burned / (% nitrogen)
Ko	=	0.46 SCF of exhaust / lb of oxygen burned / (% oxygen)
GCV	=	Gross caloric value of the fuel based on fuel gas analysis in BTU/lb
GCV	=	22539

% of fuel gas which is made up of the following elements

H	=	23.51 %
C	=	71.84 %
S	=	0.00 %
N	=	1.70 %
O	=	2.96 %

$$O2Fd = \frac{[(Khd \times H) + (Kc \times C) + (Ks \times S) + (Kn \times N) - (Ko \times O2)] \times 1000000}{GCV}$$

O2Fd =[(3.64 x 23.509486) + (1.53 x 71.835028) +

(0.57 x 0) + (0.14 x 1.6951199) -

(0.46 x 2.9603663)] x 1000000 / 22538.555

O2Fd = [85.575 + 109.907592 +

0 + 0.23731679 -

1.3618] x 1000000 / 22538.55

O2Fd = 8623

legend

EPA METHOD 19 MASS EMISSION CALCULATIONS (DRY)

R	=	Fuel Consumption- Amount Of BTU's Consumed In One Hour		
F	=	EPA "F" Factor (Method 19)	=	8623
PPMVD	=	PPM Volume Of Emittant Dry In Engine Exhaust		
%O2	=	Measured % Of Excess Net Oxygen In Engine Exhaust		
L	=	Ideal Gas Law = 385.4 SCF Of Any Gas Per One lb-mole (40CFR60APP.A,Meth.17.6.2)		
E	=	Engine Fuel Efficiency (BTU/BHP/hr) (HHV)		
SCFH	=	Stard Cubic Feet per Hour		
SCFM	=	Stard Cubic Feet per Minute		
FC	=	Fuel Gas Consumption in Standard Cubic Feet per Hour		
EHP	=	Engine Horsepower		
BTUF	=	BTU Content (HHV) of Fuel Gas	=	998.58738

measurements

		%O2	PPMVD CO	PPMVD NOx	FC	EHP
RUN 1	=	8.512	18.1	165.4	8660	1020
RUN 2	=	8.757	26.2	162.1	8660	1020
RUN 3	=	8.783	27.1	168.3	8660	1020

Fuel Flow Calculations

$$R = \frac{FC \times BTUF}{1000000} = MMBTU/HR \qquad E = \frac{FC \times BTUF}{EHP} = BTU(HHV)/BHP/Hr$$

R = RUN 1	8660	998.58738 / 1000000	=	8.6478	E = RUN 1	8660	998.58738 / 1020	=	8478
R = RUN 2	8660	998.58738 / 1000000	=	8.6478	E = RUN 2	8660	998.58738 / 1020	=	8478
R = RUN 3	8660	998.58738 / 1000000	=	8.6478	E = RUN 3	8660	998.58738 / 1020	=	8478

Exh Flow Calculatons (DRY)

$$SCFH = \frac{R \times F \times 20.9}{20.9 - \%O2} = SCFH \text{ Stack Flow} \qquad SCFM = \frac{SCFH}{60} = SCFM \text{ Stack Flow}$$

SCFH = RUN 1	8.6478	8623	20.9 / 12.388	=	125810	SCFM = RUN 1	125810 / 60	=	2097
SCFH = RUN 2	8.6478	8623	20.9 / 12.143	=	128342	SCFM = RUN 2	128342 / 60	=	2139
SCFH = RUN 3	8.6478	8623	20.9 / 12.117	=	128619	SCFM = RUN 3	128619 / 60	=	2144

EMISSION CALCULATIONS

	SCFH	PPMVD / 1000000	MW / L		lbs/Hr	lbs/hr	24 / 2000	365		Tons/Year
	LBS/HR					**Tons/Year**				
lbs/hr =				=					=	
NOx RUN 1	125810	165.38521 / 1000000	46 / 385.4	=	2.48 NOx Lbs/Hr	2.48	24 / 2000	365	=	10.88 NOx Tons/Year
NOx RUN 2	128342	162.13616 / 1000000	46 / 385.4	=	2.48 NOx Lbs/Hr	2.48	24 / 2000	365	=	10.88 NOx Tons/Year
NOx RUN 3	128619	168.25803 / 1000000	46 / 385.4	=	2.58 NOx Lbs/Hr	2.58	24 / 2000	365	=	11.32 NOx Tons/Year
CO RUN1	125810	18.103136 / 1000000	28 / 385.4	=	0.17 CO Lbs/Hr	0.17	24 / 2000	365	=	0.72 CO Tons/Year
CO RUN 2	128342	26.211382 / 1000000	28 / 385.4	=	0.24 CO Lbs/Hr	0.24	24 / 2000	365	=	1.07 CO Tons/Year
CO RUN 3	128619	27.147012 / 1000000	28 / 385.4	=	0.25 CO Lbs/Hr	0.25	24 / 2000	365	=	1.11 CO Tons/Year

grm/BHP/hr

	E	F / 1000000	20.9 - %O2	PPMVD / 1000000	MW / L	453.6		
g/BHP/hr =								
NOx g/BHP/hr = RUN 1	8478	8623 / 1000000	20.9 - %O2	165.38521 / 1000000	46 / 385.328	453.6	=	1.10
NOx g/BHP/hr = RUN 2	8478	8623 / 1000000	20.9 - %O2	162.13616 / 1000000	46 / 385.328	453.6	=	1.10
NOx g/BHP/hr = RUN 3	8478	8623 / 1000000	20.9 - %O2	168.25803 / 1000000	46 / 385.328	453.6	=	1.15
CO g/BHP/hr = RUN 1	8478	8623 / 1000000	20.9 - %O2	18.103136 / 1000000	28 / 385.328	453.6	=	0.07
CO g/BHP/hr = RUN 2	8478	8623 / 1000000	20.9 - %O2	26.211382 / 1000000	28 / 385.328	453.6	=	0.11
CO g/BHP/hr = RUN 3	8478	8623 / 1000000	20.9 - %O2	27.147012 / 1000000	28 / 385.328	453.6	=	0.11

APPENDIX B

Raw Field Data and Calibration Data Sheets

ANALYZER READINGS PER ONE MINUTE INTERVAL

(uncorrected)

Traverse Point		RUN1				RUN2				RUN3		
		COppm	NOXppm	O2%		COppm	NOXppm	O2%		COppm	NOXppm	O2%
	1	10.66	155.24	8.37	1	18.49	161.02	8.83	1	23.16	160.50	8.92
	2	9.65	157.57	8.59	2	18.65	158.78	8.85	2	24.97	160.54	8.94
	3	12.11	155.79	8.58	3	17.38	157.14	8.85	3	22.66	158.89	8.91
	4	9.42	154.90	8.60	4	17.45	157.34	8.85	4	22.52	158.86	8.91
	5	13.31	156.19	8.57	5	19.43	157.43	8.86	5	22.64	161.24	8.94
	6	9.94	156.09	8.58	6	18.06	156.55	8.87	6	23.50	161.19	8.91
	7	13.00	156.83	8.57	7	17.50	159.28	8.87	7	23.95	160.23	8.93
	8	9.84	158.66	8.58	8	16.87	155.23	8.85	8	24.51	161.38	8.93
	9	12.87	156.60	8.58	9	16.98	160.38	8.85	9	25.10	160.39	8.93
1	10	12.55	158.38	8.60	10	17.90	161.17	8.87	10	23.05	161.00	8.91
	11	11.97	158.78	8.59	11	14.34	159.23	8.90	11	24.61	161.23	8.91
	12	10.16	158.38	8.56	12	18.58	159.42	8.89	12	25.12	159.66	8.93
	13	10.85	160.15	8.56	13	16.42	157.54	8.90	13	23.53	163.33	8.91
	14	10.40	160.00	8.55	14	20.69	156.53	8.89	14	25.10	163.69	8.93
	15	11.39	161.78	8.60	15	17.30	157.47	8.93	15	27.15	163.84	8.94
	16	11.29	159.38	8.56	16	21.42	159.19	8.91	16	22.58	164.50	8.91
	17	11.83	159.08	8.58	17	17.35	160.84	8.92	17	23.17	161.94	8.90
	18	12.32	159.41	8.57	18	17.83	158.65	8.88	18	22.58	162.03	8.93
	19	10.36	159.07	8.59	19	19.30	158.88	8.88	19	26.00	161.18	8.93
	20	8.35	159.09	8.57	20	18.33	159.15	8.91	20	24.71	160.93	8.93
	21	11.32	158.53	8.58	21	19.69	161.96	8.80	21	21.71	162.74	8.93
	22	9.46	157.73	8.60	22	18.18	159.02	8.83	22	21.77	163.85	8.92
	23	11.55	159.29	8.57	23	19.39	160.86	8.85	23	24.02	164.82	8.93
	24	13.29	159.98	8.56	24	19.53	160.00	8.85	24	23.36	161.32	8.94
	25	13.72	159.90	8.59	25	21.53	159.34	8.85	25	23.98	163.18	8.94
	26	11.13	159.33	8.59	26	19.86	160.42	8.86	26	25.58	164.13	8.92
	27	11.94	157.97	8.58	27	21.74	162.46	8.87	27	26.32	160.17	8.94
	28	8.55	160.13	8.57	28	18.20	159.72	8.86	28	23.64	162.67	8.93
	29	12.29	160.77	8.56	29	21.06	160.13	8.88	29	25.59	163.77	8.94
2	30	12.76	159.72	8.57	30	19.12	145.68	8.83	30	22.87	162.18	8.95
	31	10.25	160.59	8.62	31	18.43	124.06	9.15	31	23.32	160.32	8.97
	32	12.60	159.32	8.57	32	16.62	161.38	8.84	32	23.40	162.35	8.95
	33	11.57	157.65	8.59	33	21.72	164.61	8.86	33	25.79	162.78	8.95
	34	10.70	157.00	8.58	34	21.67	163.74	8.86	34	25.78	164.14	8.94
	35	10.32	159.16	8.59	35	20.27	160.32	8.88	35	26.79	163.16	8.95
	36	12.10	160.60	8.59	36	22.55	160.19	8.88	36	24.29	163.40	8.93
	37	9.63	157.30	8.59	37	24.04	157.32	8.90	37	25.17	162.83	8.94
	38	11.47	161.75	8.58	38	23.53	155.59	8.87	38	26.75	165.24	8.96
	39	10.88	160.09	8.57	39	24.01	154.54	8.92	39	23.38	165.23	8.94
	40	7.32	157.57	8.60	40	24.58	150.36	8.91	40	21.20	163.74	8.94
	41	9.36	158.28	8.63	41	25.02	149.40	8.92	41	25.29	166.12	8.93
	42	11.52	161.91	8.60	42	26.50	150.39	8.89	42	24.88	166.44	8.94
	43	11.57	160.70	8.65	43	28.14	148.49	8.90	43	23.37	164.82	8.96
	44	11.78	162.91	8.61	44	26.38	150.61	8.88	44	25.95	165.48	8.95
	45	12.98	160.22	8.62	45	26.92	149.72	8.91	45	26.28	167.37	8.94
	46	12.43	165.69	8.61	46	25.05	149.06	8.92	46	26.47	166.44	8.95
	47	12.17	166.74	8.60	47	26.92	147.40	8.92	47	25.33	166.71	8.94
	48	12.00	159.91	8.66	48	25.60	145.53	8.97	48	24.08	166.26	8.93
	49	12.83	160.15	8.63	49	25.81	146.79	8.94	49	27.36	167.67	8.94
3	50	14.39	162.02	8.65	50	26.41	146.61	8.93	50	26.01	169.22	8.94
	51	16.09	163.97	8.66	51	25.72	153.74	8.91	51	26.59	169.40	8.91
	52	12.18	164.89	8.68	52	25.37	157.40	8.95	52	25.71	165.79	8.97
	53	12.85	164.39	8.67	53	25.61	156.23	8.93	53	24.37	168.07	8.95
	54	14.39	167.34	8.65	54	25.62	155.40	8.93	54	27.72	165.77	8.94
	55	13.87	163.60	8.70	55	22.81	159.03	8.96	55	23.78	167.96	8.99
	56	16.08	165.00	8.70	56	27.61	156.79	8.95	56	26.88	166.65	8.97
	57	16.13	162.83	8.71	57	24.98	155.90	8.95	57	25.05	167.92	8.92
	58	16.82	163.28	8.74	58	24.78	155.65	8.99	58	24.56	168.91	8.95
	59	13.40	160.10	8.78	59	25.28	155.77	8.96	59	27.56	166.66	8.99
	60	17.13	161.20	8.76	60	27.67	155.11	8.94	60	24.45	163.70	8.96
		11.92	160.01	8.60		21.57	155.96	8.89		24.61	163.76	8.94

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/25/2010	09:15:40 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.04	0.36	0.00	-0.47	0.00	0.00	0.00	0.00
1/25/2010	09:15:55 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.77	0.00	0.34	0.00	0.00	0.00	0.00
1/25/2010	09:16:10 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.43	0.00	-3.64	0.00	0.00	0.00	0.00
1/25/2010	09:16:25 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.91	0.00	-0.72	0.00	0.00	0.00	0.00
1/25/2010	09:16:40 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.64	0.00	-0.09	0.00	0.00	0.00	0.00
1/25/2010	09:16:55 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.41	0.00	-0.08	0.00	0.00	0.00	0.00
1/25/2010	09:17:10 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.82	0.00	-2.37	0.00	0.00	0.00	0.00
1/25/2010	09:17:25 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	1.57	0.00	-2.49	0.00	0.00	0.00	0.00
1/25/2010	09:17:40 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	0.44	0.00	-3.20	0.00	0.00	0.00	0.00
1/25/2010	09:17:55 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	2.02	0.00	-1.79	0.00	0.00	0.00	0.00
1/25/2010	09:18:10 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	1.29	0.00	-0.11	0.00	0.00	0.00	0.00
1/25/2010	09:18:25 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	ZER-001	0.03	1.07	0.00	-2.47	0.00	0.00	0.00	0.00
1/25/2010	09:20:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.77	241.16	0.00	242.45	0.00	-0.05	-3.32	-1.17
1/25/2010	09:21:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.00	241.18	0.00	242.34	0.00	355.04	-0.46	-0.56
1/25/2010	09:21:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.95	241.14	0.00	242.69	0.00	703.74	-1.50	-1.22
1/25/2010	09:21:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.98	241.10	0.00	242.37	0.00	704.75	1.15	-2.07
1/25/2010	09:21:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.95	241.11	0.00	243.12	0.00	702.80	-6.17	0.39
1/25/2010	09:22:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.95	241.30	0.00	242.22	0.00	702.38	-1.16	-1.80
1/25/2010	09:22:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.97	241.09	0.00	242.37	0.00	700.06	-1.22	-0.44
1/25/2010	09:22:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.00	241.90	0.00	242.32	0.00	702.89	-1.89	-0.15
1/25/2010	09:22:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.02	241.02	0.00	243.28	0.00	702.24	-3.93	-0.22
1/25/2010	09:23:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.02	241.10	0.00	243.89	0.00	701.38	-1.88	-3.42
1/25/2010	09:23:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.00	241.47	0.00	243.92	0.00	702.58	-0.15	0.03
1/25/2010	09:23:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.00	241.45	0.00	243.09	0.00	702.16	-1.13	-0.15
1/25/2010	09:23:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.03	242.51	0.00	240.72	0.00	702.54	-1.86	1.00
1/25/2010	09:24:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.00	241.57	0.00	240.80	0.00	702.57	0.49	1.44
1/25/2010	09:24:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	20.98	241.85	0.00	242.56	0.00	703.01	1.68	-1.27
1/25/2010	09:24:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.03	241.68	0.00	242.05	0.00	702.04	-3.26	-2.84
1/25/2010	09:24:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.07	241.25	0.00	242.12	0.00	702.66	-2.44	-1.49
1/25/2010	09:25:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.07	241.12	0.00	242.65	0.00	704.22	-0.17	-1.47
1/25/2010	09:25:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.09	241.03	0.00	242.27	0.00	703.81	-1.31	-2.99
1/25/2010	09:25:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.03	241.13	0.00	242.92	0.00	704.21	-0.15	-2.10
1/25/2010	09:25:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.05	241.27	0.00	240.75	0.00	705.01	-2.99	-0.40
1/25/2010	09:26:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.05	241.18	0.00	242.70	0.00	704.25	0.39	-1.61
1/25/2010	09:26:23 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.05	241.08	0.00	242.85	0.00	705.53	-4.88	0.61
1/25/2010	09:26:38 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.03	241.02	0.00	243.71	0.00	703.06	-0.76	-0.15
1/25/2010	09:26:53 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.03	241.07	0.00	244.71	0.00	702.08	-1.20	-2.17
1/25/2010	09:27:08 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALH-001	21.02	241.13	0.00	242.38	0.00	704.60	-1.25	0.18

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/25/2010	09:32:34 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.31	125.48	0.00	124.83	0.00	0.00	0.00	0.00
1/25/2010	09:32:49 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.33	124.35	0.00	128.39	0.00	0.00	0.00	0.00
1/25/2010	09:33:04 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.10	126.26	0.00	123.54	0.00	0.00	0.00	0.00
1/25/2010	09:33:19 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.59	126.37	0.00	124.13	0.00	0.00	0.00	0.00
1/25/2010	09:33:34 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.56	126.87	0.00	125.01	0.00	0.00	0.00	0.00
1/25/2010	09:33:49 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.63	125.01	0.00	128.12	0.00	0.00	0.00	0.00
1/25/2010	09:34:04 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.61	125.12	0.00	119.52	0.00	0.00	0.00	0.00
1/25/2010	09:34:19 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.60	124.72	0.00	128.41	0.00	0.00	0.00	0.00
1/25/2010	09:34:34 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.59	125.71	0.00	123.51	0.00	0.00	0.00	0.00
1/25/2010	09:34:49 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.58	125.51	0.00	125.59	0.00	0.00	0.00	0.00
1/25/2010	09:35:04 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.61	126.44	0.00	125.08	0.00	0.00	0.00	0.00
1/25/2010	09:35:19 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.62	125.53	0.00	126.84	0.00	0.00	0.00	0.00
1/25/2010	09:35:34 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.62	125.73	0.00	124.93	0.00	0.00	0.00	0.00
1/25/2010	09:35:49 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.61	125.79	0.00	124.85	0.00	0.00	0.00	0.00
1/25/2010	09:36:04 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.63	124.71	0.00	125.27	0.00	0.00	0.00	0.00
1/25/2010	09:36:19 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.63	123.78	0.00	126.61	0.00	0.00	0.00	0.00
1/25/2010	09:36:34 AM	Apollo Compressor Statior	MC1661	Caterpillar G3516 TALE	CALM-001	12.62	125.04	0.00	121.87	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/25/2010	09:39:34 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	46.94	0.00	-0.94	0.00	0.00	0.00	0.00
1/25/2010	09:39:49 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	46.96	0.00	0.10	0.00	0.00	0.00	0.00
1/25/2010	09:40:04 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	47.39	0.00	-0.30	0.00	0.00	0.00	0.00
1/25/2010	09:40:19 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	47.77	0.00	-2.82	0.00	0.00	0.00	0.00
1/25/2010	09:40:34 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	46.68	0.00	-0.80	0.00	0.00	0.00	0.00
1/25/2010	09:40:49 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.04	48.05	0.00	0.61	0.00	0.00	0.00	0.00
1/25/2010	09:41:04 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	47.07	0.00	-2.67	0.00	0.00	0.00	0.00
1/25/2010	09:41:19 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	48.06	0.00	-6.03	0.00	0.00	0.00	0.00
1/25/2010	09:41:34 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	47.43	0.00	-6.67	0.00	0.00	0.00	0.00
1/25/2010	09:41:49 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	47.68	0.00	-5.47	0.00	0.00	0.00	0.00
1/25/2010	09:42:04 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	46.76	0.00	0.55	0.00	0.00	0.00	0.00
1/25/2010	09:42:19 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	nox cnv	0.03	46.88	0.00	-0.07	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,8}$	HC RT	THC cut	CH4 cut
1/25/2010	09:44:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.04	1.09	0.00	-0.59	0.00	0.00	0.00	0.00
1/25/2010	09:45:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.04	1.24	0.00	-2.91	0.00	0.00	0.00	0.00
1/25/2010	09:45:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.04	1.21	0.00	-2.61	0.00	0.00	0.00	0.00
1/25/2010	09:45:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.04	8.83	0.00	-3.40	0.00	0.00	0.00	0.00
1/25/2010	09:45:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	56.91	0.00	-1.85	0.00	0.00	0.00	0.00
1/25/2010	09:46:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	107.44	0.00	-2.47	0.00	0.00	0.00	0.00
1/25/2010	09:46:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	114.40	0.00	-4.53	0.00	0.00	0.00	0.00
1/25/2010	09:46:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	116.21	0.00	-1.63	0.00	0.00	0.00	0.00
1/25/2010	09:46:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	116.92	0.00	-1.11	0.00	0.00	0.00	0.00
1/25/2010	09:47:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	117.09	0.00	-2.58	0.00	0.00	0.00	0.00
1/25/2010	09:47:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	117.87	0.00	-2.56	0.00	0.00	0.00	0.00
1/25/2010	09:47:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	118.51	0.00	-1.86	0.00	0.00	0.00	0.00
1/25/2010	09:47:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	118.82	0.00	-6.09	0.00	0.00	0.00	0.00
1/25/2010	09:48:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	118.88	0.00	-1.82	0.00	0.00	0.00	0.00
1/25/2010	09:48:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	8.09	105.91	0.00	-1.30	0.00	0.00	0.00	0.00
1/25/2010	09:48:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	12.31	45.84	0.00	-3.60	0.00	0.00	0.00	0.00
1/25/2010	09:48:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	12.42	3.67	0.00	-1.65	0.00	0.00	0.00	0.00
1/25/2010	09:49:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	12.48	0.78	0.00	-3.83	0.00	0.00	0.00	0.00
1/25/2010	09:49:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	7.27	1.57	0.00	45.71	0.00	0.00	0.00	0.00
1/25/2010	09:49:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.07	0.91	0.00	118.12	0.00	0.00	0.00	0.00
1/25/2010	09:49:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.44	0.00	119.18	0.00	0.00	0.00	0.00
1/25/2010	09:50:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.04	0.52	0.00	115.91	0.00	0.00	0.00	0.00
1/25/2010	09:50:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.22	0.00	119.45	0.00	0.00	0.00	0.00
1/25/2010	09:50:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	0.96	0.00	115.12	0.00	0.00	0.00	0.00
1/25/2010	09:50:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.25	0.00	118.67	0.00	0.00	0.00	0.00
1/25/2010	09:51:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.21	0.00	108.91	0.00	0.00	0.00	0.00
1/25/2010	09:51:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.31	0.00	114.20	0.00	0.00	0.00	0.00
1/25/2010	09:51:36 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.29	0.00	114.90	0.00	0.00	0.00	0.00
1/25/2010	09:51:51 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	1.16	0.00	119.18	0.00	0.00	0.00	0.00
1/25/2010	09:52:06 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	0.61	0.00	121.12	0.00	0.00	0.00	0.00
1/25/2010	09:52:21 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-001	0.03	0.66	0.00	119.23	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/25/2010	10:00:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.24	153.44	0.00	13.54	0.00	0.00	0.00	0.00
1/25/2010	10:00:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.19	152.30	0.00	13.78	0.00	0.00	0.00	0.00
1/25/2010	10:00:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.21	148.19	0.00	15.24	0.00	0.00	0.00	0.00
1/25/2010	10:00:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.20	152.76	0.00	13.37	0.00	0.00	0.00	0.00
1/25/2010	10:01:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.18	154.13	0.00	6.81	0.00	0.00	0.00	0.00
1/25/2010	10:01:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.18	153.84	0.00	12.60	0.00	0.00	0.00	0.00
1/25/2010	10:01:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	154.78	0.00	13.97	0.00	0.00	0.00	0.00
1/25/2010	10:01:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	158.21	0.00	9.25	0.00	0.00	0.00	0.00
1/25/2010	10:02:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	161.45	0.00	9.86	0.00	0.00	0.00	0.00
1/25/2010	10:02:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.38	0.00	10.95	0.00	0.00	0.00	0.00
1/25/2010	10:02:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	155.67	0.00	7.66	0.00	0.00	0.00	0.00
1/25/2010	10:02:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	154.76	0.00	10.11	0.00	0.00	0.00	0.00
1/25/2010	10:03:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	153.03	0.00	12.25	0.00	0.00	0.00	0.00
1/25/2010	10:03:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	156.76	0.00	15.72	0.00	0.00	0.00	0.00
1/25/2010	10:03:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	157.92	0.00	6.51	0.00	0.00	0.00	0.00
1/25/2010	10:03:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	155.43	0.00	13.97	0.00	0.00	0.00	0.00
1/25/2010	10:04:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	154.56	0.00	10.00	0.00	0.00	0.00	0.00
1/25/2010	10:04:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	156.41	0.00	9.47	0.00	0.00	0.00	0.00
1/25/2010	10:04:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	155.77	0.00	4.90	0.00	0.00	0.00	0.00
1/25/2010	10:04:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	152.87	0.00	13.31	0.00	0.00	0.00	0.00
1/25/2010	10:05:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	154.09	0.00	14.36	0.00	0.00	0.00	0.00
1/25/2010	10:05:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	156.08	0.00	14.24	0.00	0.00	0.00	0.00
1/25/2010	10:05:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	157.14	0.00	15.26	0.00	0.00	0.00	0.00
1/25/2010	10:05:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	157.44	0.00	9.36	0.00	0.00	0.00	0.00
1/25/2010	10:06:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	155.57	0.00	8.78	0.00	0.00	0.00	0.00
1/25/2010	10:06:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	156.89	0.00	8.76	0.00	0.00	0.00	0.00
1/25/2010	10:06:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	155.11	0.00	10.08	0.00	0.00	0.00	0.00
1/25/2010	10:06:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	156.77	0.00	12.13	0.00	0.00	0.00	0.00
1/25/2010	10:07:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.51	157.84	0.00	12.13	0.00	0.00	0.00	0.00
1/25/2010	10:07:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	155.96	0.00	13.32	0.00	0.00	0.00	0.00
1/25/2010	10:07:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	157.33	0.00	14.55	0.00	0.00	0.00	0.00
1/25/2010	10:07:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	156.18	0.00	11.99	0.00	0.00	0.00	0.00
1/25/2010	10:08:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	157.41	0.00	8.80	0.00	0.00	0.00	0.00
1/25/2010	10:08:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	157.09	0.00	3.71	0.00	0.00	0.00	0.00
1/25/2010	10:08:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.75	0.00	12.71	0.00	0.00	0.00	0.00
1/25/2010	10:08:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.39	0.00	14.14	0.00	0.00	0.00	0.00
1/25/2010	10:09:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	156.99	0.00	12.24	0.00	0.00	0.00	0.00
1/25/2010	10:09:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	155.69	0.00	12.46	0.00	0.00	0.00	0.00
1/25/2010	10:09:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	156.58	0.00	13.48	0.00	0.00	0.00	0.00
1/25/2010	10:09:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	157.15	0.00	13.29	0.00	0.00	0.00	0.00
1/25/2010	10:10:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.42	0.00	16.09	0.00	0.00	0.00	0.00
1/25/2010	10:10:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	159.07	0.00	13.69	0.00	0.00	0.00	0.00
1/25/2010	10:10:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	158.63	0.00	8.73	0.00	0.00	0.00	0.00
1/25/2010	10:10:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	158.39	0.00	11.69	0.00	0.00	0.00	0.00
1/25/2010	10:11:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	158.53	0.00	13.42	0.00	0.00	0.00	0.00
1/25/2010	10:11:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	156.86	0.00	8.22	0.00	0.00	0.00	0.00
1/25/2010	10:11:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.49	0.00	12.52	0.00	0.00	0.00	0.00
1/25/2010	10:11:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	159.23	0.00	13.70	0.00	0.00	0.00	0.00
1/25/2010	10:12:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	157.86	0.00	11.51	0.00	0.00	0.00	0.00
1/25/2010	10:12:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.23	0.00	9.54	0.00	0.00	0.00	0.00
1/25/2010	10:12:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.51	156.51	0.00	10.98	0.00	0.00	0.00	0.00
1/25/2010	10:12:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	161.90	0.00	8.59	0.00	0.00	0.00	0.00
1/25/2010	10:13:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	162.66	0.00	11.49	0.00	0.00	0.00	0.00

1/25/2010	10:13:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	160.47	0.00	10.05	0.00	0.00	0.00	0.00
1/25/2010	10:13:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.74	0.00	10.37	0.00	0.00	0.00	0.00
1/25/2010	10:13:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.53	158.73	0.00	11.48	0.00	0.00	0.00	0.00
1/25/2010	10:14:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	160.36	0.00	9.79	0.00	0.00	0.00	0.00
1/25/2010	10:14:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.53	158.30	0.00	8.65	0.00	0.00	0.00	0.00
1/25/2010	10:14:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	160.07	0.00	14.38	0.00	0.00	0.00	0.00
1/25/2010	10:14:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	161.27	0.00	8.76	0.00	0.00	0.00	0.00
1/25/2010	10:15:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	163.56	0.00	11.89	0.00	0.00	0.00	0.00
1/25/2010	10:15:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	162.80	0.00	10.16	0.00	0.00	0.00	0.00
1/25/2010	10:15:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	160.55	0.00	12.22	0.00	0.00	0.00	0.00
1/25/2010	10:15:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.53	160.21	0.00	11.27	0.00	0.00	0.00	0.00
1/25/2010	10:16:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.31	0.00	3.28	0.00	0.00	0.00	0.00
1/25/2010	10:16:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.52	158.50	0.00	14.45	0.00	0.00	0.00	0.00
1/25/2010	10:16:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	159.91	0.00	16.77	0.00	0.00	0.00	0.00
1/25/2010	10:16:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.80	0.00	10.65	0.00	0.00	0.00	0.00
1/25/2010	10:17:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	160.22	0.00	10.54	0.00	0.00	0.00	0.00
1/25/2010	10:17:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	161.32	0.00	12.97	0.00	0.00	0.00	0.00
1/25/2010	10:17:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	156.88	0.00	10.35	0.00	0.00	0.00	0.00
1/25/2010	10:17:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	157.89	0.00	13.45	0.00	0.00	0.00	0.00
1/25/2010	10:18:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	160.50	0.00	14.53	0.00	0.00	0.00	0.00
1/25/2010	10:18:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	158.96	0.00	8.55	0.00	0.00	0.00	0.00
1/25/2010	10:18:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	159.77	0.00	15.87	0.00	0.00	0.00	0.00
1/25/2010	10:18:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.40	0.00	10.32	0.00	0.00	0.00	0.00
1/25/2010	10:19:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.10	0.00	8.46	0.00	0.00	0.00	0.00
1/25/2010	10:19:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	159.87	0.00	13.56	0.00	0.00	0.00	0.00
1/25/2010	10:19:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	160.11	0.00	11.81	0.00	0.00	0.00	0.00
1/25/2010	10:19:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	159.21	0.00	7.62	0.00	0.00	0.00	0.00
1/25/2010	10:20:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.23	0.00	4.63	0.00	0.00	0.00	0.00
1/25/2010	10:20:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	159.29	0.00	9.30	0.00	0.00	0.00	0.00
1/25/2010	10:20:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	159.54	0.00	7.97	0.00	0.00	0.00	0.00
1/25/2010	10:20:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	158.30	0.00	11.50	0.00	0.00	0.00	0.00
1/25/2010	10:21:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	158.33	0.00	13.01	0.00	0.00	0.00	0.00
1/25/2010	10:21:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	159.92	0.00	8.86	0.00	0.00	0.00	0.00
1/25/2010	10:21:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.82	0.00	12.77	0.00	0.00	0.00	0.00
1/25/2010	10:21:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	157.05	0.00	10.65	0.00	0.00	0.00	0.00
1/25/2010	10:22:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.29	0.00	6.48	0.00	0.00	0.00	0.00
1/25/2010	10:22:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	158.62	0.00	9.00	0.00	0.00	0.00	0.00
1/25/2010	10:22:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	158.03	0.00	10.73	0.00	0.00	0.00	0.00
1/25/2010	10:22:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	156.97	0.00	11.61	0.00	0.00	0.00	0.00
1/25/2010	10:23:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	156.94	0.00	12.49	0.00	0.00	0.00	0.00
1/25/2010	10:23:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	159.02	0.00	13.13	0.00	0.00	0.00	0.00
1/25/2010	10:23:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	159.62	0.00	11.91	0.00	0.00	0.00	0.00
1/25/2010	10:23:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	161.59	0.00	8.67	0.00	0.00	0.00	0.00
1/25/2010	10:24:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.53	162.96	0.00	13.25	0.00	0.00	0.00	0.00
1/25/2010	10:24:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	160.41	0.00	11.36	0.00	0.00	0.00	0.00
1/25/2010	10:24:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	157.83	0.00	15.51	0.00	0.00	0.00	0.00
1/25/2010	10:24:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	158.72	0.00	13.02	0.00	0.00	0.00	0.00
1/25/2010	10:25:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	160.65	0.00	13.00	0.00	0.00	0.00	0.00
1/25/2010	10:25:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.32	0.00	11.26	0.00	0.00	0.00	0.00
1/25/2010	10:25:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	159.30	0.00	14.06	0.00	0.00	0.00	0.00
1/25/2010	10:25:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	160.31	0.00	16.55	0.00	0.00	0.00	0.00
1/25/2010	10:26:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	161.09	0.00	8.18	0.00	0.00	0.00	0.00
1/25/2010	10:26:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	161.25	0.00	11.19	0.00	0.00	0.00	0.00
1/25/2010	10:26:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.56	0.00	13.81	0.00	0.00	0.00	0.00
1/25/2010	10:26:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	157.41	0.00	11.34	0.00	0.00	0.00	0.00
1/25/2010	10:27:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	158.22	0.00	11.98	0.00	0.00	0.00	0.00
1/25/2010	10:27:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	157.81	0.00	10.71	0.00	0.00	0.00	0.00
1/25/2010	10:27:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	156.81	0.00	12.79	0.00	0.00	0.00	0.00

1/25/2010	10:27:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	159.04	0.00	12.29	0.00	0.00	0.00	0.00
1/25/2010	10:28:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	156.70	0.00	9.91	0.00	0.00	0.00	0.00
1/25/2010	10:28:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	159.74	0.00	11.64	0.00	0.00	0.00	0.00
1/25/2010	10:28:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	163.37	0.00	7.73	0.00	0.00	0.00	0.00
1/25/2010	10:28:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	160.72	0.00	4.92	0.00	0.00	0.00	0.00
1/25/2010	10:29:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	159.94	0.00	14.83	0.00	0.00	0.00	0.00
1/25/2010	10:29:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	158.97	0.00	12.43	0.00	0.00	0.00	0.00
1/25/2010	10:29:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	161.97	0.00	10.65	0.00	0.00	0.00	0.00
1/25/2010	10:29:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	162.21	0.00	11.26	0.00	0.00	0.00	0.00
1/25/2010	10:30:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	159.70	0.00	14.39	0.00	0.00	0.00	0.00
1/25/2010	10:30:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.41	0.00	10.23	0.00	0.00	0.00	0.00
1/25/2010	10:30:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.37	0.00	14.60	0.00	0.00	0.00	0.00
1/25/2010	10:30:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.40	0.00	11.83	0.00	0.00	0.00	0.00
1/25/2010	10:31:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	160.65	0.00	12.49	0.00	0.00	0.00	0.00
1/25/2010	10:31:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	163.25	0.00	8.46	0.00	0.00	0.00	0.00
1/25/2010	10:31:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	160.02	0.00	6.47	0.00	0.00	0.00	0.00
1/25/2010	10:31:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	158.45	0.00	13.59	0.00	0.00	0.00	0.00
1/25/2010	10:32:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	158.68	0.00	12.41	0.00	0.00	0.00	0.00
1/25/2010	10:32:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	158.37	0.00	13.14	0.00	0.00	0.00	0.00
1/25/2010	10:32:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.51	159.86	0.00	11.01	0.00	0.00	0.00	0.00
1/25/2010	10:32:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	160.35	0.00	13.84	0.00	0.00	0.00	0.00
1/25/2010	10:33:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	158.53	0.00	7.16	0.00	0.00	0.00	0.00
1/25/2010	10:33:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	156.79	0.00	10.78	0.00	0.00	0.00	0.00
1/25/2010	10:33:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	157.10	0.00	14.02	0.00	0.00	0.00	0.00
1/25/2010	10:33:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.16	0.00	14.31	0.00	0.00	0.00	0.00
1/25/2010	10:34:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	155.28	0.00	16.28	0.00	0.00	0.00	0.00
1/25/2010	10:34:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.01	0.00	5.65	0.00	0.00	0.00	0.00
1/25/2010	10:34:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	157.46	0.00	12.21	0.00	0.00	0.00	0.00
1/25/2010	10:34:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.24	0.00	8.65	0.00	0.00	0.00	0.00
1/25/2010	10:35:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	157.16	0.00	8.48	0.00	0.00	0.00	0.00
1/25/2010	10:35:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	157.11	0.00	14.35	0.00	0.00	0.00	0.00
1/25/2010	10:35:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	158.62	0.00	9.50	0.00	0.00	0.00	0.00
1/25/2010	10:35:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	163.73	0.00	8.95	0.00	0.00	0.00	0.00
1/25/2010	10:36:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.64	164.26	0.00	10.38	0.00	0.00	0.00	0.00
1/25/2010	10:36:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	162.07	0.00	11.53	0.00	0.00	0.00	0.00
1/25/2010	10:36:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	159.05	0.00	12.85	0.00	0.00	0.00	0.00
1/25/2010	10:36:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.55	157.02	0.00	13.62	0.00	0.00	0.00	0.00
1/25/2010	10:37:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	155.67	0.00	13.12	0.00	0.00	0.00	0.00
1/25/2010	10:37:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	156.38	0.00	9.21	0.00	0.00	0.00	0.00
1/25/2010	10:37:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	157.88	0.00	11.28	0.00	0.00	0.00	0.00
1/25/2010	10:37:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	159.25	0.00	4.91	0.00	0.00	0.00	0.00
1/25/2010	10:38:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	161.47	0.00	7.73	0.00	0.00	0.00	0.00
1/25/2010	10:38:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	161.51	0.00	10.84	0.00	0.00	0.00	0.00
1/25/2010	10:38:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	162.06	0.00	14.52	0.00	0.00	0.00	0.00
1/25/2010	10:38:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	161.97	0.00	12.80	0.00	0.00	0.00	0.00
1/25/2010	10:39:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.75	0.00	10.87	0.00	0.00	0.00	0.00
1/25/2010	10:39:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	160.91	0.00	9.05	0.00	0.00	0.00	0.00
1/25/2010	10:39:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.54	160.89	0.00	12.90	0.00	0.00	0.00	0.00
1/25/2010	10:39:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	157.82	0.00	10.71	0.00	0.00	0.00	0.00
1/25/2010	10:40:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	158.01	0.00	7.93	0.00	0.00	0.00	0.00
1/25/2010	10:40:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.57	158.21	0.00	3.11	0.00	0.00	0.00	0.00
1/25/2010	10:40:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	156.06	0.00	8.01	0.00	0.00	0.00	0.00
1/25/2010	10:40:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	157.99	0.00	10.21	0.00	0.00	0.00	0.00
1/25/2010	10:41:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	155.79	0.00	5.71	0.00	0.00	0.00	0.00
1/25/2010	10:41:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	154.54	0.00	13.87	0.00	0.00	0.00	0.00
1/25/2010	10:41:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	160.20	0.00	9.44	0.00	0.00	0.00	0.00
1/25/2010	10:41:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	162.58	0.00	8.42	0.00	0.00	0.00	0.00
1/25/2010	10:42:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	161.68	0.00	9.73	0.00	0.00	0.00	0.00

1/25/2010	10:42:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	163.28	0.00	12.80	0.00	0.00	0.00	0.00
1/25/2010	10:42:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	161.11	0.00	12.39	0.00	0.00	0.00	0.00
1/25/2010	10:42:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	161.58	0.00	11.14	0.00	0.00	0.00	0.00
1/25/2010	10:43:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.64	162.45	0.00	11.23	0.00	0.00	0.00	0.00
1/25/2010	10:43:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	161.24	0.00	11.03	0.00	0.00	0.00	0.00
1/25/2010	10:43:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	159.98	0.00	8.82	0.00	0.00	0.00	0.00
1/25/2010	10:43:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	159.13	0.00	15.21	0.00	0.00	0.00	0.00
1/25/2010	10:44:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	163.49	0.00	12.46	0.00	0.00	0.00	0.00
1/25/2010	10:44:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	163.21	0.00	14.00	0.00	0.00	0.00	0.00
1/25/2010	10:44:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	163.33	0.00	15.62	0.00	0.00	0.00	0.00
1/25/2010	10:44:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	161.60	0.00	5.04	0.00	0.00	0.00	0.00
1/25/2010	10:45:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	160.01	0.00	15.90	0.00	0.00	0.00	0.00
1/25/2010	10:45:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	160.91	0.00	12.14	0.00	0.00	0.00	0.00
1/25/2010	10:45:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	159.90	0.00	7.87	0.00	0.00	0.00	0.00
1/25/2010	10:45:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	160.07	0.00	16.01	0.00	0.00	0.00	0.00
1/25/2010	10:46:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	160.61	0.00	10.96	0.00	0.00	0.00	0.00
1/25/2010	10:46:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	161.53	0.00	8.00	0.00	0.00	0.00	0.00
1/25/2010	10:46:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	169.92	0.00	11.98	0.00	0.00	0.00	0.00
1/25/2010	10:46:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	170.69	0.00	18.78	0.00	0.00	0.00	0.00
1/25/2010	10:47:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.56	171.19	0.00	10.84	0.00	0.00	0.00	0.00
1/25/2010	10:47:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	168.95	0.00	14.52	0.00	0.00	0.00	0.00
1/25/2010	10:47:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	164.25	0.00	13.73	0.00	0.00	0.00	0.00
1/25/2010	10:47:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.60	162.57	0.00	9.57	0.00	0.00	0.00	0.00
1/25/2010	10:48:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	162.30	0.00	12.91	0.00	0.00	0.00	0.00
1/25/2010	10:48:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	161.00	0.00	9.41	0.00	0.00	0.00	0.00
1/25/2010	10:48:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	158.96	0.00	12.21	0.00	0.00	0.00	0.00
1/25/2010	10:48:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	157.38	0.00	13.48	0.00	0.00	0.00	0.00
1/25/2010	10:49:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.64	157.60	0.00	8.62	0.00	0.00	0.00	0.00
1/25/2010	10:49:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.61	158.72	0.00	13.12	0.00	0.00	0.00	0.00
1/25/2010	10:49:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.63	161.97	0.00	16.28	0.00	0.00	0.00	0.00
1/25/2010	10:49:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	162.31	0.00	13.29	0.00	0.00	0.00	0.00
1/25/2010	10:50:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	162.49	0.00	19.50	0.00	0.00	0.00	0.00
1/25/2010	10:50:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	161.67	0.00	11.57	0.00	0.00	0.00	0.00
1/25/2010	10:50:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.59	161.38	0.00	14.25	0.00	0.00	0.00	0.00
1/25/2010	10:50:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	162.55	0.00	12.25	0.00	0.00	0.00	0.00
1/25/2010	10:51:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	164.39	0.00	18.01	0.00	0.00	0.00	0.00
1/25/2010	10:51:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	162.18	0.00	13.83	0.00	0.00	0.00	0.00
1/25/2010	10:51:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	163.79	0.00	14.94	0.00	0.00	0.00	0.00
1/25/2010	10:51:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.62	165.50	0.00	17.57	0.00	0.00	0.00	0.00
1/25/2010	10:52:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	167.05	0.00	12.05	0.00	0.00	0.00	0.00
1/25/2010	10:52:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	165.15	0.00	8.00	0.00	0.00	0.00	0.00
1/25/2010	10:52:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.72	163.86	0.00	11.12	0.00	0.00	0.00	0.00
1/25/2010	10:52:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.67	163.51	0.00	17.55	0.00	0.00	0.00	0.00
1/25/2010	10:53:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	163.93	0.00	13.45	0.00	0.00	0.00	0.00
1/25/2010	10:53:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.69	163.01	0.00	16.54	0.00	0.00	0.00	0.00
1/25/2010	10:53:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	165.40	0.00	9.50	0.00	0.00	0.00	0.00
1/25/2010	10:53:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	165.22	0.00	11.92	0.00	0.00	0.00	0.00
1/25/2010	10:54:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	164.34	0.00	16.06	0.00	0.00	0.00	0.00
1/25/2010	10:54:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.58	167.15	0.00	13.45	0.00	0.00	0.00	0.00
1/25/2010	10:54:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	169.32	0.00	13.59	0.00	0.00	0.00	0.00
1/25/2010	10:54:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	168.53	0.00	14.47	0.00	0.00	0.00	0.00
1/25/2010	10:55:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.69	165.22	0.00	15.15	0.00	0.00	0.00	0.00
1/25/2010	10:55:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	163.60	0.00	13.66	0.00	0.00	0.00	0.00
1/25/2010	10:55:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	162.75	0.00	7.38	0.00	0.00	0.00	0.00
1/25/2010	10:55:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.66	162.83	0.00	19.30	0.00	0.00	0.00	0.00
1/25/2010	10:56:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.69	164.38	0.00	17.60	0.00	0.00	0.00	0.00
1/25/2010	10:56:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.68	163.85	0.00	15.28	0.00	0.00	0.00	0.00
1/25/2010	10:56:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.69	166.59	0.00	17.00	0.00	0.00	0.00	0.00

1/25/2010	10:56:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.72	165.19	0.00	14.44	0.00	0.00	0.00	0.00
1/25/2010	10:57:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.65	164.61	0.00	15.51	0.00	0.00	0.00	0.00
1/25/2010	10:57:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.74	163.72	0.00	16.13	0.00	0.00	0.00	0.00
1/25/2010	10:57:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.72	161.64	0.00	14.96	0.00	0.00	0.00	0.00
1/25/2010	10:57:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	161.35	0.00	17.92	0.00	0.00	0.00	0.00
1/25/2010	10:58:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.70	165.06	0.00	17.33	0.00	0.00	0.00	0.00
1/25/2010	10:58:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.74	164.85	0.00	15.57	0.00	0.00	0.00	0.00
1/25/2010	10:58:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.74	162.15	0.00	17.18	0.00	0.00	0.00	0.00
1/25/2010	10:58:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.77	161.05	0.00	17.19	0.00	0.00	0.00	0.00
1/25/2010	10:59:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.83	160.23	0.00	17.95	0.00	0.00	0.00	0.00
1/25/2010	10:59:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.78	158.81	0.00	11.62	0.00	0.00	0.00	0.00
1/25/2010	10:59:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.76	159.15	0.00	14.42	0.00	0.00	0.00	0.00
1/25/2010	10:59:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	162.21	0.00	9.60	0.00	0.00	0.00	0.00
1/25/2010	11:00:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	163.44	0.00	14.71	0.00	0.00	0.00	0.00
1/25/2010	11:00:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.75	162.22	0.00	12.19	0.00	0.00	0.00	0.00
1/25/2010	11:00:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.73	160.91	0.00	17.22	0.00	0.00	0.00	0.00
1/25/2010	11:00:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.83	158.22	0.00	24.41	0.00	0.00	0.00	0.00
1/25/2010	11:01:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.83	159.43	0.00	17.21	0.00	0.00	0.00	0.00
1/25/2010	11:01:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.75	157.97	0.00	16.41	0.00	0.00	0.00	0.00
1/25/2010	11:01:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.82	159.10	0.00	15.27	0.00	0.00	0.00	0.00
1/25/2010	11:01:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-001	8.81	157.79	0.00	19.30	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/25/2010	11:03:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	2.91	0.00	-7.78	0.00	0.00	0.00	0.00
1/25/2010	11:03:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	2.01	0.00	-6.12	0.00	0.00	0.00	0.00
1/25/2010	11:04:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.00	0.00	-3.20	0.00	0.00	0.00	0.00
1/25/2010	11:04:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.16	0.00	-5.02	0.00	0.00	0.00	0.00
1/25/2010	11:04:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.53	0.00	-7.14	0.00	0.00	0.00	0.00
1/25/2010	11:04:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.99	0.00	-3.68	0.00	0.00	0.00	0.00
1/25/2010	11:05:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.00	0.00	-6.67	0.00	0.00	0.00	0.00
1/25/2010	11:05:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	0.95	0.00	-6.84	0.00	0.00	0.00	0.00
1/25/2010	11:05:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	15.77	0.00	-5.32	0.00	0.00	0.00	0.00
1/25/2010	11:05:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	76.32	0.00	-6.97	0.00	0.00	0.00	0.00
1/25/2010	11:06:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	118.04	0.00	-5.19	0.00	0.00	0.00	0.00
1/25/2010	11:06:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	120.90	0.00	-4.11	0.00	0.00	0.00	0.00
1/25/2010	11:06:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	121.21	0.00	-4.12	0.00	0.00	0.00	0.00
1/25/2010	11:06:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	121.36	0.00	-6.19	0.00	0.00	0.00	0.00
1/25/2010	11:07:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	9.23	105.29	0.00	-5.33	0.00	0.00	0.00	0.00
1/25/2010	11:07:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	12.56	41.77	0.00	-6.65	0.00	0.00	0.00	0.00
1/25/2010	11:07:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	12.62	2.89	0.00	-4.74	0.00	0.00	0.00	0.00
1/25/2010	11:07:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	12.62	1.22	0.00	-5.18	0.00	0.00	0.00	0.00
1/25/2010	11:08:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	4.36	1.32	0.00	75.32	0.00	0.00	0.00	0.00
1/25/2010	11:08:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.04	1.06	0.00	120.48	0.00	0.00	0.00	0.00
1/25/2010	11:08:44 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.04	0.68	0.00	120.66	0.00	0.00	0.00	0.00
1/25/2010	11:08:59 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.04	0.93	0.00	121.36	0.00	0.00	0.00	0.00
1/25/2010	11:09:14 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	1.10	0.00	122.32	0.00	0.00	0.00	0.00
1/25/2010	11:09:29 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-002	0.03	0.92	0.00	123.31	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/25/2010	11:11:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.80	154.96	0.00	22.43	0.00	0.00	0.00	0.00
1/25/2010	11:11:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	156.25	0.00	14.88	0.00	0.00	0.00	0.00
1/25/2010	11:11:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.79	159.08	0.00	17.54	0.00	0.00	0.00	0.00
1/25/2010	11:11:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.79	160.18	0.00	16.04	0.00	0.00	0.00	0.00
1/25/2010	11:12:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	159.18	0.00	15.92	0.00	0.00	0.00	0.00
1/25/2010	11:12:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.78	159.82	0.00	18.97	0.00	0.00	0.00	0.00
1/25/2010	11:12:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	162.20	0.00	22.62	0.00	0.00	0.00	0.00
1/25/2010	11:12:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	162.89	0.00	16.45	0.00	0.00	0.00	0.00
1/25/2010	11:13:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.82	160.54	0.00	17.47	0.00	0.00	0.00	0.00
1/25/2010	11:13:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	158.08	0.00	16.58	0.00	0.00	0.00	0.00
1/25/2010	11:13:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	157.33	0.00	17.85	0.00	0.00	0.00	0.00
1/25/2010	11:13:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	159.15	0.00	22.70	0.00	0.00	0.00	0.00
1/25/2010	11:14:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	159.28	0.00	14.38	0.00	0.00	0.00	0.00
1/25/2010	11:14:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	158.50	0.00	20.21	0.00	0.00	0.00	0.00
1/25/2010	11:14:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	154.45	0.00	17.19	0.00	0.00	0.00	0.00
1/25/2010	11:14:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	156.33	0.00	17.73	0.00	0.00	0.00	0.00
1/25/2010	11:15:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	156.52	0.00	12.84	0.00	0.00	0.00	0.00
1/25/2010	11:15:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	158.55	0.00	18.64	0.00	0.00	0.00	0.00
1/25/2010	11:15:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	157.30	0.00	23.06	0.00	0.00	0.00	0.00
1/25/2010	11:15:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	156.97	0.00	15.27	0.00	0.00	0.00	0.00
1/25/2010	11:16:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	156.15	0.00	22.40	0.00	0.00	0.00	0.00
1/25/2010	11:16:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.82	158.56	0.00	20.07	0.00	0.00	0.00	0.00
1/25/2010	11:16:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	156.71	0.00	15.95	0.00	0.00	0.00	0.00
1/25/2010	11:16:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	158.29	0.00	19.29	0.00	0.00	0.00	0.00
1/25/2010	11:17:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	157.81	0.00	20.98	0.00	0.00	0.00	0.00
1/25/2010	11:17:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	155.03	0.00	18.15	0.00	0.00	0.00	0.00
1/25/2010	11:17:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	156.00	0.00	16.50	0.00	0.00	0.00	0.00
1/25/2010	11:17:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	157.37	0.00	16.61	0.00	0.00	0.00	0.00
1/25/2010	11:18:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	159.88	0.00	20.40	0.00	0.00	0.00	0.00
1/25/2010	11:18:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	160.49	0.00	16.61	0.00	0.00	0.00	0.00
1/25/2010	11:18:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	160.04	0.00	14.96	0.00	0.00	0.00	0.00
1/25/2010	11:18:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	156.69	0.00	18.01	0.00	0.00	0.00	0.00
1/25/2010	11:19:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	153.46	0.00	18.88	0.00	0.00	0.00	0.00
1/25/2010	11:19:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	155.15	0.00	17.85	0.00	0.00	0.00	0.00
1/25/2010	11:19:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	155.04	0.00	15.37	0.00	0.00	0.00	0.00
1/25/2010	11:19:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	157.25	0.00	15.38	0.00	0.00	0.00	0.00
1/25/2010	11:20:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	160.23	0.00	17.61	0.00	0.00	0.00	0.00
1/25/2010	11:20:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	161.01	0.00	15.21	0.00	0.00	0.00	0.00
1/25/2010	11:20:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	160.48	0.00	18.86	0.00	0.00	0.00	0.00
1/25/2010	11:20:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	159.80	0.00	16.24	0.00	0.00	0.00	0.00
1/25/2010	11:21:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	158.47	0.00	16.06	0.00	0.00	0.00	0.00
1/25/2010	11:21:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	161.31	0.00	21.96	0.00	0.00	0.00	0.00
1/25/2010	11:21:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	161.97	0.00	17.29	0.00	0.00	0.00	0.00
1/25/2010	11:21:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	162.91	0.00	16.28	0.00	0.00	0.00	0.00
1/25/2010	11:22:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	161.20	0.00	11.19	0.00	0.00	0.00	0.00
1/25/2010	11:22:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	159.69	0.00	21.85	0.00	0.00	0.00	0.00
1/25/2010	11:22:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	157.52	0.00	14.09	0.00	0.00	0.00	0.00
1/25/2010	11:22:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	158.49	0.00	10.24	0.00	0.00	0.00	0.00
1/25/2010	11:23:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	158.04	0.00	23.03	0.00	0.00	0.00	0.00
1/25/2010	11:23:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	159.11	0.00	16.39	0.00	0.00	0.00	0.00
1/25/2010	11:23:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	160.12	0.00	16.22	0.00	0.00	0.00	0.00
1/25/2010	11:23:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	160.40	0.00	18.67	0.00	0.00	0.00	0.00
1/25/2010	11:24:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	158.53	0.00	12.91	0.00	0.00	0.00	0.00

1/25/2010	11:24:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	157.70	0.00	19.38	0.00	0.00	0.00	0.00
1/25/2010	11:24:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	156.51	0.00	15.54	0.00	0.00	0.00	0.00
1/25/2010	11:24:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	157.43	0.00	17.85	0.00	0.00	0.00	0.00
1/25/2010	11:25:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	156.31	0.00	22.24	0.00	0.00	0.00	0.00
1/25/2010	11:25:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	157.02	0.00	24.49	0.00	0.00	0.00	0.00
1/25/2010	11:25:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	157.87	0.00	18.67	0.00	0.00	0.00	0.00
1/25/2010	11:25:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	154.92	0.00	17.35	0.00	0.00	0.00	0.00
1/25/2010	11:26:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	156.52	0.00	14.86	0.00	0.00	0.00	0.00
1/25/2010	11:26:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	158.43	0.00	14.72	0.00	0.00	0.00	0.00
1/25/2010	11:26:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	156.21	0.00	18.06	0.00	0.00	0.00	0.00
1/25/2010	11:26:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	158.73	0.00	21.55	0.00	0.00	0.00	0.00
1/25/2010	11:27:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	160.03	0.00	22.82	0.00	0.00	0.00	0.00
1/25/2010	11:27:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	157.78	0.00	17.82	0.00	0.00	0.00	0.00
1/25/2010	11:27:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	160.22	0.00	22.98	0.00	0.00	0.00	0.00
1/25/2010	11:27:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	158.72	0.00	22.07	0.00	0.00	0.00	0.00
1/25/2010	11:28:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	160.23	0.00	18.58	0.00	0.00	0.00	0.00
1/25/2010	11:28:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	160.38	0.00	16.75	0.00	0.00	0.00	0.00
1/25/2010	11:28:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	162.24	0.00	14.33	0.00	0.00	0.00	0.00
1/25/2010	11:28:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.98	160.52	0.00	19.74	0.00	0.00	0.00	0.00
1/25/2010	11:29:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	159.36	0.00	21.76	0.00	0.00	0.00	0.00
1/25/2010	11:29:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	160.22	0.00	14.02	0.00	0.00	0.00	0.00
1/25/2010	11:29:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	156.42	0.00	19.99	0.00	0.00	0.00	0.00
1/25/2010	11:29:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	158.59	0.00	15.54	0.00	0.00	0.00	0.00
1/25/2010	11:30:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	159.27	0.00	17.71	0.00	0.00	0.00	0.00
1/25/2010	11:30:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	159.15	0.00	17.88	0.00	0.00	0.00	0.00
1/25/2010	11:30:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	158.58	0.00	21.45	0.00	0.00	0.00	0.00
1/25/2010	11:30:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	158.51	0.00	20.14	0.00	0.00	0.00	0.00
1/25/2010	11:31:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	157.93	0.00	17.84	0.00	0.00	0.00	0.00
1/25/2010	11:31:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	158.64	0.00	19.71	0.00	0.00	0.00	0.00
1/25/2010	11:31:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	158.57	0.00	15.00	0.00	0.00	0.00	0.00
1/25/2010	11:31:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	161.45	0.00	20.78	0.00	0.00	0.00	0.00
1/25/2010	11:32:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	15.36	161.81	0.00	21.42	0.00	0.00	0.00	0.00
1/25/2010	11:32:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	162.35	0.00	17.38	0.00	0.00	0.00	0.00
1/25/2010	11:32:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	163.14	0.00	19.49	0.00	0.00	0.00	0.00
1/25/2010	11:32:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.55	0.00	20.45	0.00	0.00	0.00	0.00
1/25/2010	11:33:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.99	0.00	18.97	0.00	0.00	0.00	0.00
1/25/2010	11:33:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.35	0.00	16.21	0.00	0.00	0.00	0.00
1/25/2010	11:33:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.65	0.00	22.57	0.00	0.00	0.00	0.00
1/25/2010	11:33:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.10	0.00	14.96	0.00	0.00	0.00	0.00
1/25/2010	11:34:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.22	0.00	25.09	0.00	0.00	0.00	0.00
1/25/2010	11:34:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.48	0.00	11.75	0.00	0.00	0.00	0.00
1/25/2010	11:34:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	162.17	0.00	19.36	0.00	0.00	0.00	0.00
1/25/2010	11:34:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	161.57	0.00	21.35	0.00	0.00	0.00	0.00
1/25/2010	11:35:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.58	0.00	22.92	0.00	0.00	0.00	0.00
1/25/2010	11:35:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	161.08	0.00	15.26	0.00	0.00	0.00	0.00
1/25/2010	11:35:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.65	0.00	19.01	0.00	0.00	0.00	0.00
1/25/2010	11:35:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.70	0.00	20.94	0.00	0.00	0.00	0.00
1/25/2010	11:36:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.07	0.00	18.23	0.00	0.00	0.00	0.00
1/25/2010	11:36:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	157.29	0.00	18.71	0.00	0.00	0.00	0.00
1/25/2010	11:36:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.91	0.00	27.01	0.00	0.00	0.00	0.00
1/25/2010	11:36:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.07	0.00	22.18	0.00	0.00	0.00	0.00
1/25/2010	11:37:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.85	0.00	19.53	0.00	0.00	0.00	0.00
1/25/2010	11:37:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.69	0.00	16.59	0.00	0.00	0.00	0.00
1/25/2010	11:37:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.77	0.00	18.88	0.00	0.00	0.00	0.00
1/25/2010	11:37:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	162.35	0.00	24.43	0.00	0.00	0.00	0.00
1/25/2010	11:38:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	163.27	0.00	24.43	0.00	0.00	0.00	0.00
1/25/2010	11:38:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	161.95	0.00	18.70	0.00	0.00	0.00	0.00
1/25/2010	11:38:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	161.76	0.00	20.15	0.00	0.00	0.00	0.00

1/25/2010	11:38:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	162.84	0.00	23.69	0.00	0.00	0.00	0.00
1/25/2010	11:39:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	160.79	0.00	17.35	0.00	0.00	0.00	0.00
1/25/2010	11:39:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.93	0.00	21.76	0.00	0.00	0.00	0.00
1/25/2010	11:39:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.44	0.00	12.35	0.00	0.00	0.00	0.00
1/25/2010	11:39:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.71	0.00	21.33	0.00	0.00	0.00	0.00
1/25/2010	11:40:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	159.87	0.00	22.13	0.00	0.00	0.00	0.00
1/25/2010	11:40:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	24.97	158.99	0.00	17.33	0.00	0.00	0.00	0.00
1/25/2010	11:40:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	14.62	161.47	0.00	23.45	0.00	0.00	0.00	0.00
1/25/2010	11:40:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	160.17	0.00	21.31	0.00	0.00	0.00	0.00
1/25/2010	11:41:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	162.40	0.00	19.33	0.00	0.00	0.00	0.00
1/25/2010	11:41:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	158.84	0.00	19.53	0.00	0.00	0.00	0.00
1/25/2010	11:41:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	136.13	0.00	23.00	0.00	0.00	0.00	0.00
1/25/2010	11:41:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.79	125.33	0.00	14.63	0.00	0.00	0.00	0.00
1/25/2010	11:42:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.08	149.35	0.00	19.08	0.00	0.00	0.00	0.00
1/25/2010	11:42:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.17	127.70	0.00	17.02	0.00	0.00	0.00	0.00
1/25/2010	11:42:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.18	101.25	0.00	18.58	0.00	0.00	0.00	0.00
1/25/2010	11:42:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.15	117.95	0.00	19.05	0.00	0.00	0.00	0.00
1/25/2010	11:43:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	154.60	0.00	18.50	0.00	0.00	0.00	0.00
1/25/2010	11:43:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	165.27	0.00	21.62	0.00	0.00	0.00	0.00
1/25/2010	11:43:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.82	161.16	0.00	11.40	0.00	0.00	0.00	0.00
1/25/2010	11:43:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	164.47	0.00	14.94	0.00	0.00	0.00	0.00
1/25/2010	11:44:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	165.22	0.00	21.60	0.00	0.00	0.00	0.00
1/25/2010	11:44:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	165.78	0.00	20.35	0.00	0.00	0.00	0.00
1/25/2010	11:44:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	164.16	0.00	19.38	0.00	0.00	0.00	0.00
1/25/2010	11:44:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	163.28	0.00	25.53	0.00	0.00	0.00	0.00
1/25/2010	11:45:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.81	165.45	0.00	24.38	0.00	0.00	0.00	0.00
1/25/2010	11:45:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	163.77	0.00	21.11	0.00	0.00	0.00	0.00
1/25/2010	11:45:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	162.94	0.00	19.08	0.00	0.00	0.00	0.00
1/25/2010	11:45:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	162.78	0.00	22.12	0.00	0.00	0.00	0.00
1/25/2010	11:46:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	161.41	0.00	20.54	0.00	0.00	0.00	0.00
1/25/2010	11:46:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	158.57	0.00	14.59	0.00	0.00	0.00	0.00
1/25/2010	11:46:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.84	159.29	0.00	20.86	0.00	0.00	0.00	0.00
1/25/2010	11:46:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	162.02	0.00	25.09	0.00	0.00	0.00	0.00
1/25/2010	11:47:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	161.42	0.00	25.31	0.00	0.00	0.00	0.00
1/25/2010	11:47:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.85	160.49	0.00	24.51	0.00	0.00	0.00	0.00
1/25/2010	11:47:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	159.57	0.00	18.31	0.00	0.00	0.00	0.00
1/25/2010	11:47:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	159.27	0.00	22.05	0.00	0.00	0.00	0.00
1/25/2010	11:48:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	157.76	0.00	24.76	0.00	0.00	0.00	0.00
1/25/2010	11:48:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	156.60	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	11:48:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	158.34	0.00	23.03	0.00	0.00	0.00	0.00
1/25/2010	11:48:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	156.59	0.00	24.62	0.00	0.00	0.00	0.00
1/25/2010	11:49:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.86	155.74	0.00	21.86	0.00	0.00	0.00	0.00
1/25/2010	11:49:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	155.97	0.00	23.53	0.00	0.00	0.00	0.00
1/25/2010	11:49:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	154.61	0.00	22.57	0.00	0.00	0.00	0.00
1/25/2010	11:49:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	156.03	0.00	26.14	0.00	0.00	0.00	0.00
1/25/2010	11:50:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	158.59	0.00	23.20	0.00	0.00	0.00	0.00
1/25/2010	11:50:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	155.63	0.00	25.14	0.00	0.00	0.00	0.00
1/25/2010	11:50:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	152.96	0.00	22.27	0.00	0.00	0.00	0.00
1/25/2010	11:50:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	150.96	0.00	25.42	0.00	0.00	0.00	0.00
1/25/2010	11:51:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	151.63	0.00	25.36	0.00	0.00	0.00	0.00
1/25/2010	11:51:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	151.99	0.00	23.09	0.00	0.00	0.00	0.00
1/25/2010	11:51:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	148.15	0.00	23.57	0.00	0.00	0.00	0.00
1/25/2010	11:51:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	149.68	0.00	26.30	0.00	0.00	0.00	0.00
1/25/2010	11:52:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	150.12	0.00	26.42	0.00	0.00	0.00	0.00
1/25/2010	11:52:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	148.63	0.00	25.33	0.00	0.00	0.00	0.00
1/25/2010	11:52:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	149.41	0.00	27.75	0.00	0.00	0.00	0.00
1/25/2010	11:52:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	149.44	0.00	20.57	0.00	0.00	0.00	0.00
1/25/2010	11:53:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	151.20	0.00	27.94	0.00	0.00	0.00	0.00

1/25/2010	11:53:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	151.60	0.00	23.14	0.00	0.00	0.00	0.00
1/25/2010	11:53:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	150.68	0.00	27.26	0.00	0.00	0.00	0.00
1/25/2010	11:53:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	148.07	0.00	27.67	0.00	0.00	0.00	0.00
1/25/2010	11:54:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	146.88	0.00	26.00	0.00	0.00	0.00	0.00
1/25/2010	11:54:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	146.77	0.00	25.67	0.00	0.00	0.00	0.00
1/25/2010	11:54:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	151.05	0.00	31.35	0.00	0.00	0.00	0.00
1/25/2010	11:54:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	149.26	0.00	29.54	0.00	0.00	0.00	0.00
1/25/2010	11:55:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	149.13	0.00	25.31	0.00	0.00	0.00	0.00
1/25/2010	11:55:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	150.64	0.00	25.05	0.00	0.00	0.00	0.00
1/25/2010	11:55:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	151.44	0.00	27.83	0.00	0.00	0.00	0.00
1/25/2010	11:55:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	151.21	0.00	27.34	0.00	0.00	0.00	0.00
1/25/2010	11:56:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	148.26	0.00	24.52	0.00	0.00	0.00	0.00
1/25/2010	11:56:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	149.72	0.00	25.75	0.00	0.00	0.00	0.00
1/25/2010	11:56:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	151.55	0.00	30.27	0.00	0.00	0.00	0.00
1/25/2010	11:56:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	149.35	0.00	27.12	0.00	0.00	0.00	0.00
1/25/2010	11:57:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.88	148.58	0.00	25.01	0.00	0.00	0.00	0.00
1/25/2010	11:57:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	149.76	0.00	26.08	0.00	0.00	0.00	0.00
1/25/2010	11:57:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.97	149.74	0.00	25.15	0.00	0.00	0.00	0.00
1/25/2010	11:57:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	148.16	0.00	23.94	0.00	0.00	0.00	0.00
1/25/2010	11:58:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	147.62	0.00	29.10	0.00	0.00	0.00	0.00
1/25/2010	11:58:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	146.59	0.00	28.44	0.00	0.00	0.00	0.00
1/25/2010	11:58:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	148.12	0.00	22.20	0.00	0.00	0.00	0.00
1/25/2010	11:58:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	147.25	0.00	27.95	0.00	0.00	0.00	0.00
1/25/2010	11:59:05 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	145.64	0.00	25.86	0.00	0.00	0.00	0.00
1/25/2010	11:59:20 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	144.24	0.00	26.46	0.00	0.00	0.00	0.00
1/25/2010	11:59:35 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.98	145.59	0.00	22.03	0.00	0.00	0.00	0.00
1/25/2010	11:59:50 AM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.99	146.63	0.00	28.03	0.00	0.00	0.00	0.00
1/25/2010	12:00:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	148.45	0.00	27.51	0.00	0.00	0.00	0.00
1/25/2010	12:00:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	146.37	0.00	29.26	0.00	0.00	0.00	0.00
1/25/2010	12:00:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	145.90	0.00	25.26	0.00	0.00	0.00	0.00
1/25/2010	12:00:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	146.43	0.00	21.20	0.00	0.00	0.00	0.00
1/25/2010	12:01:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	147.95	0.00	27.70	0.00	0.00	0.00	0.00
1/25/2010	12:01:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	147.05	0.00	26.38	0.00	0.00	0.00	0.00
1/25/2010	12:01:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	145.02	0.00	26.12	0.00	0.00	0.00	0.00
1/25/2010	12:01:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.99	146.43	0.00	25.42	0.00	0.00	0.00	0.00
1/25/2010	12:02:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	151.15	0.00	23.91	0.00	0.00	0.00	0.00
1/25/2010	12:02:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.83	153.98	0.00	24.38	0.00	0.00	0.00	0.00
1/25/2010	12:02:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.90	154.86	0.00	29.59	0.00	0.00	0.00	0.00
1/25/2010	12:02:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	154.95	0.00	24.98	0.00	0.00	0.00	0.00
1/25/2010	12:03:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.99	156.21	0.00	28.97	0.00	0.00	0.00	0.00
1/25/2010	12:03:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	158.58	0.00	24.19	0.00	0.00	0.00	0.00
1/25/2010	12:03:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	157.51	0.00	26.63	0.00	0.00	0.00	0.00
1/25/2010	12:03:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	157.29	0.00	21.69	0.00	0.00	0.00	0.00
1/25/2010	12:04:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	157.30	0.00	20.11	0.00	0.00	0.00	0.00
1/25/2010	12:04:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.87	156.09	0.00	26.86	0.00	0.00	0.00	0.00
1/25/2010	12:04:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	156.48	0.00	28.28	0.00	0.00	0.00	0.00
1/25/2010	12:04:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.95	155.05	0.00	27.18	0.00	0.00	0.00	0.00
1/25/2010	12:05:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.89	153.53	0.00	27.07	0.00	0.00	0.00	0.00
1/25/2010	12:05:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	156.08	0.00	23.41	0.00	0.00	0.00	0.00
1/25/2010	12:05:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.97	153.64	0.00	24.61	0.00	0.00	0.00	0.00
1/25/2010	12:05:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	158.34	0.00	27.40	0.00	0.00	0.00	0.00
1/25/2010	12:06:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	161.41	0.00	22.32	0.00	0.00	0.00	0.00
1/25/2010	12:06:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.98	159.45	0.00	23.78	0.00	0.00	0.00	0.00
1/25/2010	12:06:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	157.46	0.00	21.44	0.00	0.00	0.00	0.00
1/25/2010	12:06:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	157.78	0.00	23.71	0.00	0.00	0.00	0.00
1/25/2010	12:07:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	155.37	0.00	22.70	0.00	0.00	0.00	0.00
1/25/2010	12:07:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.97	157.25	0.00	29.84	0.00	0.00	0.00	0.00
1/25/2010	12:07:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.93	157.12	0.00	27.92	0.00	0.00	0.00	0.00

1/25/2010	12:07:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.98	157.42	0.00	29.96	0.00	0.00	0.00	0.00
1/25/2010	12:08:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	156.88	0.00	20.81	0.00	0.00	0.00	0.00
1/25/2010	12:08:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	157.00	0.00	23.17	0.00	0.00	0.00	0.00
1/25/2010	12:08:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	155.14	0.00	25.73	0.00	0.00	0.00	0.00
1/25/2010	12:08:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	154.56	0.00	30.20	0.00	0.00	0.00	0.00
1/25/2010	12:09:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	152.67	0.00	26.84	0.00	0.00	0.00	0.00
1/25/2010	12:09:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.01	154.12	0.00	26.74	0.00	0.00	0.00	0.00
1/25/2010	12:09:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.01	157.65	0.00	22.05	0.00	0.00	0.00	0.00
1/25/2010	12:09:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.97	158.15	0.00	23.47	0.00	0.00	0.00	0.00
1/25/2010	12:10:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	9.01	156.94	0.00	27.18	0.00	0.00	0.00	0.00
1/25/2010	12:10:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	154.32	0.00	22.73	0.00	0.00	0.00	0.00
1/25/2010	12:10:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.98	155.95	0.00	28.20	0.00	0.00	0.00	0.00
1/25/2010	12:10:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.92	155.88	0.00	22.99	0.00	0.00	0.00	0.00
1/25/2010	12:11:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.94	153.42	0.00	26.11	0.00	0.00	0.00	0.00
1/25/2010	12:11:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	153.76	0.00	30.36	0.00	0.00	0.00	0.00
1/25/2010	12:11:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.91	155.92	0.00	27.42	0.00	0.00	0.00	0.00
1/25/2010	12:11:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	157.35	0.00	26.77	0.00	0.00	0.00	0.00
1/25/2010	12:12:05 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	155.99	0.00	26.82	0.00	0.00	0.00	0.00
1/25/2010	12:12:20 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	156.35	0.00	25.09	0.00	0.00	0.00	0.00
1/25/2010	12:12:35 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.96	153.90	0.00	17.99	0.00	0.00	0.00	0.00
1/25/2010	12:12:50 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-002	8.95	152.70	0.00	28.66	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/25/2010	12:16:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.05	2.27	0.00	-0.51	0.00	0.00	0.00	0.00
1/25/2010	12:16:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.84	0.00	-1.49	0.00	0.00	0.00	0.00
1/25/2010	12:16:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.36	0.00	-1.19	0.00	0.00	0.00	0.00
1/25/2010	12:17:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.71	0.00	-2.30	0.00	0.00	0.00	0.00
1/25/2010	12:17:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.73	0.00	-0.31	0.00	0.00	0.00	0.00
1/25/2010	12:17:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.56	0.00	-3.09	0.00	0.00	0.00	0.00
1/25/2010	12:17:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	0.92	0.00	-1.40	0.00	0.00	0.00	0.00
1/25/2010	12:18:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	18.62	0.00	-1.58	0.00	0.00	0.00	0.00
1/25/2010	12:18:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	78.35	0.00	1.45	0.00	0.00	0.00	0.00
1/25/2010	12:18:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	115.63	0.00	0.57	0.00	0.00	0.00	0.00
1/25/2010	12:18:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	116.72	0.00	-4.46	0.00	0.00	0.00	0.00
1/25/2010	12:19:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.05	117.35	0.00	1.70	0.00	0.00	0.00	0.00
1/25/2010	12:19:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	117.56	0.00	-1.54	0.00	0.00	0.00	0.00
1/25/2010	12:19:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	9.59	101.57	0.00	2.63	0.00	0.00	0.00	0.00
1/25/2010	12:19:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	12.60	39.83	0.00	-1.03	0.00	0.00	0.00	0.00
1/25/2010	12:20:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	12.64	2.85	0.00	-1.00	0.00	0.00	0.00	0.00
1/25/2010	12:20:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	12.65	1.40	0.00	-2.62	0.00	0.00	0.00	0.00
1/25/2010	12:20:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	4.32	0.92	0.00	85.09	0.00	0.00	0.00	0.00
1/25/2010	12:20:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.11	1.30	0.00	124.99	0.00	0.00	0.00	0.00
1/25/2010	12:21:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.06	1.32	0.00	125.98	0.00	0.00	0.00	0.00
1/25/2010	12:21:22 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.05	0.88	0.00	125.91	0.00	0.00	0.00	0.00
1/25/2010	12:21:37 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.05	0.96	0.00	126.09	0.00	0.00	0.00	0.00
1/25/2010	12:21:52 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.05	1.26	0.00	125.07	0.00	0.00	0.00	0.00
1/25/2010	12:22:07 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-003	0.04	1.08	0.00	126.44	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^X	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/25/2010	12:23:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	155.93	0.00	27.56	0.00	0.00	0.00	0.00
1/25/2010	12:23:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	158.53	0.00	22.05	0.00	0.00	0.00	0.00
1/25/2010	12:24:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	158.63	0.00	23.94	0.00	0.00	0.00	0.00
1/25/2010	12:24:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	159.71	0.00	22.26	0.00	0.00	0.00	0.00
1/25/2010	12:24:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	159.08	0.00	18.40	0.00	0.00	0.00	0.00
1/25/2010	12:24:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	159.15	0.00	26.85	0.00	0.00	0.00	0.00
1/25/2010	12:25:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	161.77	0.00	24.38	0.00	0.00	0.00	0.00
1/25/2010	12:25:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.99	0.00	23.01	0.00	0.00	0.00	0.00
1/25/2010	12:25:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.51	0.00	26.63	0.00	0.00	0.00	0.00
1/25/2010	12:25:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.63	0.00	25.67	0.00	0.00	0.00	0.00
1/25/2010	12:26:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	159.71	0.00	22.40	0.00	0.00	0.00	0.00
1/25/2010	12:26:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	158.32	0.00	25.17	0.00	0.00	0.00	0.00
1/25/2010	12:26:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	157.71	0.00	17.40	0.00	0.00	0.00	0.00
1/25/2010	12:26:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.88	157.00	0.00	23.66	0.00	0.00	0.00	0.00
1/25/2010	12:27:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	160.06	0.00	23.31	0.00	0.00	0.00	0.00
1/25/2010	12:27:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	160.79	0.00	26.25	0.00	0.00	0.00	0.00
1/25/2010	12:27:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	157.94	0.00	17.26	0.00	0.00	0.00	0.00
1/25/2010	12:27:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	158.48	0.00	23.33	0.00	0.00	0.00	0.00
1/25/2010	12:28:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	158.19	0.00	21.77	0.00	0.00	0.00	0.00
1/25/2010	12:28:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	160.84	0.00	27.70	0.00	0.00	0.00	0.00
1/25/2010	12:28:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	161.19	0.00	24.61	0.00	0.00	0.00	0.00
1/25/2010	12:28:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	160.21	0.00	22.24	0.00	0.00	0.00	0.00
1/25/2010	12:29:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	163.63	0.00	24.11	0.00	0.00	0.00	0.00
1/25/2010	12:29:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	159.94	0.00	19.58	0.00	0.00	0.00	0.00
1/25/2010	12:29:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.86	160.30	0.00	19.56	0.00	0.00	0.00	0.00
1/25/2010	12:29:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	160.54	0.00	26.35	0.00	0.00	0.00	0.00
1/25/2010	12:30:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.84	0.00	23.36	0.00	0.00	0.00	0.00
1/25/2010	12:30:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	162.07	0.00	24.71	0.00	0.00	0.00	0.00
1/25/2010	12:30:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	161.44	0.00	18.12	0.00	0.00	0.00	0.00
1/25/2010	12:30:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	159.42	0.00	21.52	0.00	0.00	0.00	0.00
1/25/2010	12:31:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	160.01	0.00	25.94	0.00	0.00	0.00	0.00
1/25/2010	12:31:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	160.04	0.00	30.23	0.00	0.00	0.00	0.00
1/25/2010	12:31:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	161.75	0.00	26.29	0.00	0.00	0.00	0.00
1/25/2010	12:31:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	162.55	0.00	26.85	0.00	0.00	0.00	0.00
1/25/2010	12:32:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	160.85	0.00	18.81	0.00	0.00	0.00	0.00
1/25/2010	12:32:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	160.35	0.00	26.08	0.00	0.00	0.00	0.00
1/25/2010	12:32:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	160.76	0.00	24.85	0.00	0.00	0.00	0.00
1/25/2010	12:32:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.87	0.00	25.67	0.00	0.00	0.00	0.00
1/25/2010	12:33:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	159.65	0.00	25.59	0.00	0.00	0.00	0.00
1/25/2010	12:33:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	159.28	0.00	24.27	0.00	0.00	0.00	0.00
1/25/2010	12:33:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	159.32	0.00	25.19	0.00	0.00	0.00	0.00
1/25/2010	12:33:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	159.27	0.00	18.89	0.00	0.00	0.00	0.00
1/25/2010	12:34:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	162.12	0.00	25.81	0.00	0.00	0.00	0.00
1/25/2010	12:34:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	163.28	0.00	22.29	0.00	0.00	0.00	0.00
1/25/2010	12:34:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	162.72	0.00	25.46	0.00	0.00	0.00	0.00
1/25/2010	12:34:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	160.09	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	12:35:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	160.84	0.00	25.97	0.00	0.00	0.00	0.00
1/25/2010	12:35:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.27	0.00	23.25	0.00	0.00	0.00	0.00
1/25/2010	12:35:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	160.02	0.00	26.81	0.00	0.00	0.00	0.00
1/25/2010	12:35:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	159.01	0.00	24.35	0.00	0.00	0.00	0.00
1/25/2010	12:36:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	159.73	0.00	27.29	0.00	0.00	0.00	0.00
1/25/2010	12:36:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	159.87	0.00	22.01	0.00	0.00	0.00	0.00
1/25/2010	12:36:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.88	0.00	24.71	0.00	0.00	0.00	0.00

1/25/2010	12:36:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	162.29	0.00	24.27	0.00	0.00	0.00	0.00
1/25/2010	12:37:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	162.99	0.00	24.54	0.00	0.00	0.00	0.00
1/25/2010	12:37:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.88	166.17	0.00	20.59	0.00	0.00	0.00	0.00
1/25/2010	12:37:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	165.09	0.00	27.63	0.00	0.00	0.00	0.00
1/25/2010	12:37:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	162.93	0.00	21.80	0.00	0.00	0.00	0.00
1/25/2010	12:38:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	163.63	0.00	27.48	0.00	0.00	0.00	0.00
1/25/2010	12:38:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.10	0.00	23.47	0.00	0.00	0.00	0.00
1/25/2010	12:38:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	160.71	0.00	24.02	0.00	0.00	0.00	0.00
1/25/2010	12:38:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	163.65	0.00	27.31	0.00	0.00	0.00	0.00
1/25/2010	12:39:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.90	0.00	28.69	0.00	0.00	0.00	0.00
1/25/2010	12:39:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.08	0.00	28.58	0.00	0.00	0.00	0.00
1/25/2010	12:39:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.96	0.00	24.82	0.00	0.00	0.00	0.00
1/25/2010	12:39:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	163.98	0.00	17.40	0.00	0.00	0.00	0.00
1/25/2010	12:40:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	166.67	0.00	24.19	0.00	0.00	0.00	0.00
1/25/2010	12:40:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	164.39	0.00	23.91	0.00	0.00	0.00	0.00
1/25/2010	12:40:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	162.79	0.00	24.98	0.00	0.00	0.00	0.00
1/25/2010	12:40:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	162.12	0.00	21.24	0.00	0.00	0.00	0.00
1/25/2010	12:41:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	161.74	0.00	20.97	0.00	0.00	0.00	0.00
1/25/2010	12:41:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	161.12	0.00	25.48	0.00	0.00	0.00	0.00
1/25/2010	12:41:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	161.75	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	12:41:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.59	0.00	18.19	0.00	0.00	0.00	0.00
1/25/2010	12:42:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.88	162.16	0.00	21.77	0.00	0.00	0.00	0.00
1/25/2010	12:42:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	162.61	0.00	26.60	0.00	0.00	0.00	0.00
1/25/2010	12:42:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	160.88	0.00	26.52	0.00	0.00	0.00	0.00
1/25/2010	12:42:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	160.04	0.00	21.48	0.00	0.00	0.00	0.00
1/25/2010	12:43:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.74	0.00	27.81	0.00	0.00	0.00	0.00
1/25/2010	12:43:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.06	0.00	28.19	0.00	0.00	0.00	0.00
1/25/2010	12:43:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	161.49	0.00	29.18	0.00	0.00	0.00	0.00
1/25/2010	12:43:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.40	0.00	21.41	0.00	0.00	0.00	0.00
1/25/2010	12:44:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	160.57	0.00	23.69	0.00	0.00	0.00	0.00
1/25/2010	12:44:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	160.27	0.00	24.57	0.00	0.00	0.00	0.00
1/25/2010	12:44:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.14	0.00	23.14	0.00	0.00	0.00	0.00
1/25/2010	12:44:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.62	0.00	20.21	0.00	0.00	0.00	0.00
1/25/2010	12:45:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	164.51	0.00	19.36	0.00	0.00	0.00	0.00
1/25/2010	12:45:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	162.68	0.00	24.13	0.00	0.00	0.00	0.00
1/25/2010	12:45:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.27	0.00	23.01	0.00	0.00	0.00	0.00
1/25/2010	12:45:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.51	0.00	17.40	0.00	0.00	0.00	0.00
1/25/2010	12:46:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	166.07	0.00	21.69	0.00	0.00	0.00	0.00
1/25/2010	12:46:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	166.53	0.00	24.96	0.00	0.00	0.00	0.00
1/25/2010	12:46:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.64	0.00	22.70	0.00	0.00	0.00	0.00
1/25/2010	12:46:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	163.88	0.00	22.93	0.00	0.00	0.00	0.00
1/25/2010	12:47:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	165.60	0.00	24.71	0.00	0.00	0.00	0.00
1/25/2010	12:47:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	164.17	0.00	25.72	0.00	0.00	0.00	0.00
1/25/2010	12:47:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	162.40	0.00	23.23	0.00	0.00	0.00	0.00
1/25/2010	12:47:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	159.93	0.00	22.17	0.00	0.00	0.00	0.00
1/25/2010	12:48:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.78	0.00	18.78	0.00	0.00	0.00	0.00
1/25/2010	12:48:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	161.16	0.00	29.27	0.00	0.00	0.00	0.00
1/25/2010	12:48:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.09	0.00	27.48	0.00	0.00	0.00	0.00
1/25/2010	12:48:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.79	0.00	22.65	0.00	0.00	0.00	0.00
1/25/2010	12:49:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.06	0.00	21.96	0.00	0.00	0.00	0.00
1/25/2010	12:49:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.78	0.00	23.83	0.00	0.00	0.00	0.00
1/25/2010	12:49:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	161.92	0.00	29.07	0.00	0.00	0.00	0.00
1/25/2010	12:49:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	164.48	0.00	25.01	0.00	0.00	0.00	0.00
1/25/2010	12:50:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	165.53	0.00	23.58	0.00	0.00	0.00	0.00
1/25/2010	12:50:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	164.59	0.00	24.65	0.00	0.00	0.00	0.00
1/25/2010	12:50:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	161.95	0.00	27.80	0.00	0.00	0.00	0.00
1/25/2010	12:50:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	160.25	0.00	23.11	0.00	0.00	0.00	0.00
1/25/2010	12:51:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	159.39	0.00	26.96	0.00	0.00	0.00	0.00

1/25/2010	12:51:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	159.09	0.00	27.40	0.00	0.00	0.00	0.00
1/25/2010	12:51:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	161.22	0.00	25.02	0.00	0.00	0.00	0.00
1/25/2010	12:51:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	161.20	0.00	20.81	0.00	0.00	0.00	0.00
1/25/2010	12:52:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	162.93	0.00	26.60	0.00	0.00	0.00	0.00
1/25/2010	12:52:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.32	0.00	22.13	0.00	0.00	0.00	0.00
1/25/2010	12:52:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	164.43	0.00	30.47	0.00	0.00	0.00	0.00
1/25/2010	12:52:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	164.76	0.00	20.54	0.00	0.00	0.00	0.00
1/25/2010	12:53:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	163.17	0.00	23.89	0.00	0.00	0.00	0.00
1/25/2010	12:53:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	162.71	0.00	27.45	0.00	0.00	0.00	0.00
1/25/2010	12:53:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	163.93	0.00	23.71	0.00	0.00	0.00	0.00
1/25/2010	12:53:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	161.03	0.00	26.30	0.00	0.00	0.00	0.00
1/25/2010	12:54:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	160.46	0.00	19.05	0.00	0.00	0.00	0.00
1/25/2010	12:54:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.31	0.00	22.43	0.00	0.00	0.00	0.00
1/25/2010	12:54:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	164.14	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	12:54:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	159.37	0.00	22.54	0.00	0.00	0.00	0.00
1/25/2010	12:55:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	157.91	0.00	23.09	0.00	0.00	0.00	0.00
1/25/2010	12:55:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	159.84	0.00	23.89	0.00	0.00	0.00	0.00
1/25/2010	12:55:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	162.34	0.00	25.47	0.00	0.00	0.00	0.00
1/25/2010	12:55:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	162.33	0.00	25.09	0.00	0.00	0.00	0.00
1/25/2010	12:56:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	162.16	0.00	21.28	0.00	0.00	0.00	0.00
1/25/2010	12:56:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	162.58	0.00	21.77	0.00	0.00	0.00	0.00
1/25/2010	12:56:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.45	0.00	23.23	0.00	0.00	0.00	0.00
1/25/2010	12:56:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	162.90	0.00	27.56	0.00	0.00	0.00	0.00
1/25/2010	12:57:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	162.59	0.00	26.41	0.00	0.00	0.00	0.00
1/25/2010	12:57:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	163.16	0.00	25.95	0.00	0.00	0.00	0.00
1/25/2010	12:57:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	163.10	0.00	27.04	0.00	0.00	0.00	0.00
1/25/2010	12:57:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.96	0.00	24.13	0.00	0.00	0.00	0.00
1/25/2010	12:58:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	165.49	0.00	25.48	0.00	0.00	0.00	0.00
1/25/2010	12:58:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.99	0.00	26.46	0.00	0.00	0.00	0.00
1/25/2010	12:58:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	163.26	0.00	27.28	0.00	0.00	0.00	0.00
1/25/2010	12:58:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	162.90	0.00	26.46	0.00	0.00	0.00	0.00
1/25/2010	12:59:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	163.22	0.00	25.92	0.00	0.00	0.00	0.00
1/25/2010	12:59:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	163.24	0.00	27.48	0.00	0.00	0.00	0.00
1/25/2010	12:59:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	162.86	0.00	27.95	0.00	0.00	0.00	0.00
1/25/2010	12:59:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	163.77	0.00	22.89	0.00	0.00	0.00	0.00
1/25/2010	01:00:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	165.19	0.00	22.73	0.00	0.00	0.00	0.00
1/25/2010	01:00:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	161.79	0.00	23.58	0.00	0.00	0.00	0.00
1/25/2010	01:00:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	159.71	0.00	25.47	0.00	0.00	0.00	0.00
1/25/2010	01:00:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	161.51	0.00	23.57	0.00	0.00	0.00	0.00
1/25/2010	01:01:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	163.78	0.00	29.08	0.00	0.00	0.00	0.00
1/25/2010	01:01:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	166.30	0.00	22.54	0.00	0.00	0.00	0.00
1/25/2010	01:01:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	167.35	0.00	29.95	0.00	0.00	0.00	0.00
1/25/2010	01:01:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	163.60	0.00	24.26	0.00	0.00	0.00	0.00
1/25/2010	01:02:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.95	0.00	24.95	0.00	0.00	0.00	0.00
1/25/2010	01:02:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	165.06	0.00	27.84	0.00	0.00	0.00	0.00
1/25/2010	01:02:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.71	0.00	24.76	0.00	0.00	0.00	0.00
1/25/2010	01:02:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	165.93	0.00	27.52	0.00	0.00	0.00	0.00
1/25/2010	01:03:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.39	0.00	22.18	0.00	0.00	0.00	0.00
1/25/2010	01:03:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	164.90	0.00	19.05	0.00	0.00	0.00	0.00
1/25/2010	01:03:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	166.07	0.00	24.68	0.00	0.00	0.00	0.00
1/25/2010	01:03:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	162.15	0.00	14.52	0.00	0.00	0.00	0.00
1/25/2010	01:04:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	161.65	0.00	25.78	0.00	0.00	0.00	0.00
1/25/2010	01:04:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	165.09	0.00	19.82	0.00	0.00	0.00	0.00
1/25/2010	01:04:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	167.79	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	01:04:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	169.76	0.00	26.11	0.00	0.00	0.00	0.00
1/25/2010	01:05:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.08	0.00	25.28	0.00	0.00	0.00	0.00
1/25/2010	01:05:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	162.86	0.00	26.00	0.00	0.00	0.00	0.00
1/25/2010	01:05:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	163.91	0.00	21.90	0.00	0.00	0.00	0.00

1/25/2010	01:05:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	167.28	0.00	24.47	0.00	0.00	0.00	0.00
1/25/2010	01:06:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	167.72	0.00	25.86	0.00	0.00	0.00	0.00
1/25/2010	01:06:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	166.83	0.00	27.29	0.00	0.00	0.00	0.00
1/25/2010	01:06:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	165.49	0.00	29.35	0.00	0.00	0.00	0.00
1/25/2010	01:06:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	164.09	0.00	20.08	0.00	0.00	0.00	0.00
1/25/2010	01:07:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	163.05	0.00	23.06	0.00	0.00	0.00	0.00
1/25/2010	01:07:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	166.64	0.00	20.97	0.00	0.00	0.00	0.00
1/25/2010	01:07:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	167.40	0.00	23.98	0.00	0.00	0.00	0.00
1/25/2010	01:07:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	164.57	0.00	25.56	0.00	0.00	0.00	0.00
1/25/2010	01:08:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	164.83	0.00	25.75	0.00	0.00	0.00	0.00
1/25/2010	01:08:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	165.12	0.00	28.50	0.00	0.00	0.00	0.00
1/25/2010	01:08:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	166.97	0.00	28.86	0.00	0.00	0.00	0.00
1/25/2010	01:08:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	167.34	0.00	20.78	0.00	0.00	0.00	0.00
1/25/2010	01:09:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	168.32	0.00	28.25	0.00	0.00	0.00	0.00
1/25/2010	01:09:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	166.83	0.00	27.21	0.00	0.00	0.00	0.00
1/25/2010	01:09:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.00	167.33	0.00	29.58	0.00	0.00	0.00	0.00
1/25/2010	01:09:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	167.61	0.00	26.33	0.00	0.00	0.00	0.00
1/25/2010	01:10:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	166.20	0.00	23.52	0.00	0.00	0.00	0.00
1/25/2010	01:10:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.63	0.00	26.44	0.00	0.00	0.00	0.00
1/25/2010	01:10:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	165.22	0.00	20.35	0.00	0.00	0.00	0.00
1/25/2010	01:10:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	167.91	0.00	27.84	0.00	0.00	0.00	0.00
1/25/2010	01:11:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	166.85	0.00	26.05	0.00	0.00	0.00	0.00
1/25/2010	01:11:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	166.85	0.00	27.06	0.00	0.00	0.00	0.00
1/25/2010	01:11:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	168.93	0.00	24.64	0.00	0.00	0.00	0.00
1/25/2010	01:11:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	167.13	0.00	26.46	0.00	0.00	0.00	0.00
1/25/2010	01:12:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	164.25	0.00	22.60	0.00	0.00	0.00	0.00
1/25/2010	01:12:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	164.71	0.00	22.62	0.00	0.00	0.00	0.00
1/25/2010	01:12:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	166.94	0.00	25.91	0.00	0.00	0.00	0.00
1/25/2010	01:12:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	167.80	0.00	27.01	0.00	0.00	0.00	0.00
1/25/2010	01:13:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	167.14	0.00	26.85	0.00	0.00	0.00	0.00
1/25/2010	01:13:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.01	168.80	0.00	29.65	0.00	0.00	0.00	0.00
1/25/2010	01:13:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	167.79	0.00	22.92	0.00	0.00	0.00	0.00
1/25/2010	01:13:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	170.18	0.00	29.99	0.00	0.00	0.00	0.00
1/25/2010	01:14:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	168.20	0.00	26.13	0.00	0.00	0.00	0.00
1/25/2010	01:14:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	170.71	0.00	24.98	0.00	0.00	0.00	0.00
1/25/2010	01:14:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	171.53	0.00	29.38	0.00	0.00	0.00	0.00
1/25/2010	01:14:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	169.41	0.00	28.19	0.00	0.00	0.00	0.00
1/25/2010	01:15:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.89	168.14	0.00	24.46	0.00	0.00	0.00	0.00
1/25/2010	01:15:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	168.50	0.00	24.33	0.00	0.00	0.00	0.00
1/25/2010	01:15:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	166.91	0.00	23.58	0.00	0.00	0.00	0.00
1/25/2010	01:15:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	166.89	0.00	26.80	0.00	0.00	0.00	0.00
1/25/2010	01:16:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	164.78	0.00	27.51	0.00	0.00	0.00	0.00
1/25/2010	01:16:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	164.57	0.00	24.95	0.00	0.00	0.00	0.00
1/25/2010	01:16:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	165.00	0.00	21.53	0.00	0.00	0.00	0.00
1/25/2010	01:16:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	169.66	0.00	24.96	0.00	0.00	0.00	0.00
1/25/2010	01:17:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	169.52	0.00	27.32	0.00	0.00	0.00	0.00
1/25/2010	01:17:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.00	168.08	0.00	23.66	0.00	0.00	0.00	0.00
1/25/2010	01:17:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	166.14	0.00	28.35	0.00	0.00	0.00	0.00
1/25/2010	01:17:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	165.39	0.00	28.44	0.00	0.00	0.00	0.00
1/25/2010	01:18:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	164.71	0.00	24.60	0.00	0.00	0.00	0.00
1/25/2010	01:18:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	166.82	0.00	29.48	0.00	0.00	0.00	0.00
1/25/2010	01:18:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.02	167.44	0.00	25.92	0.00	0.00	0.00	0.00
1/25/2010	01:18:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	169.08	0.00	24.88	0.00	0.00	0.00	0.00
1/25/2010	01:19:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	168.45	0.00	25.75	0.00	0.00	0.00	0.00
1/25/2010	01:19:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	166.85	0.00	18.58	0.00	0.00	0.00	0.00
1/25/2010	01:19:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	166.27	0.00	28.72	0.00	0.00	0.00	0.00
1/25/2010	01:19:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	168.17	0.00	25.72	0.00	0.00	0.00	0.00
1/25/2010	01:20:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	166.07	0.00	26.22	0.00	0.00	0.00	0.00

1/25/2010	01:20:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	166.07	0.00	26.85	0.00	0.00	0.00	0.00
1/25/2010	01:20:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	166.41	0.00	26.22	0.00	0.00	0.00	0.00
1/25/2010	01:20:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	168.46	0.00	21.83	0.00	0.00	0.00	0.00
1/25/2010	01:21:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	168.77	0.00	27.97	0.00	0.00	0.00	0.00
1/25/2010	01:21:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	168.03	0.00	24.19	0.00	0.00	0.00	0.00
1/25/2010	01:21:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	169.73	0.00	22.87	0.00	0.00	0.00	0.00
1/25/2010	01:21:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	168.39	0.00	27.56	0.00	0.00	0.00	0.00
1/25/2010	01:22:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	168.79	0.00	24.05	0.00	0.00	0.00	0.00
1/25/2010	01:22:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	168.73	0.00	23.75	0.00	0.00	0.00	0.00
1/25/2010	01:22:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	168.15	0.00	27.11	0.00	0.00	0.00	0.00
1/25/2010	01:22:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.05	166.94	0.00	25.31	0.00	0.00	0.00	0.00
1/25/2010	01:23:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	165.51	0.00	28.89	0.00	0.00	0.00	0.00
1/25/2010	01:23:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	166.05	0.00	28.91	0.00	0.00	0.00	0.00
1/25/2010	01:23:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.01	162.16	0.00	24.82	0.00	0.00	0.00	0.00
1/25/2010	01:23:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	159.99	0.00	24.19	0.00	0.00	0.00	0.00
1/25/2010	01:24:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	164.69	0.00	27.62	0.00	0.00	0.00	0.00
1/25/2010	01:24:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.93	167.94	0.00	21.17	0.00	0.00	0.00	0.00
1/25/2010	01:24:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	167.26	0.00	21.28	0.00	0.00	0.00	0.00
1/25/2010	01:24:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	168.09	0.00	24.76	0.00	0.00	0.00	0.00
1/25/2010	01:25:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.91	169.23	0.00	28.65	0.00	0.00	0.00	0.00
1/25/2010	01:25:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	168.76	0.00	22.84	0.00	0.00	0.00	0.00
1/25/2010	01:25:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	169.16	0.00	23.57	0.00	0.00	0.00	0.00
1/25/2010	01:25:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	170.83	0.00	26.15	0.00	0.00	0.00	0.00
1/25/2010	01:26:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	169.72	0.00	26.60	0.00	0.00	0.00	0.00
1/25/2010	01:26:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.90	166.72	0.00	24.40	0.00	0.00	0.00	0.00
1/25/2010	01:26:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	170.06	0.00	23.00	0.00	0.00	0.00	0.00
1/25/2010	01:26:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	171.06	0.00	23.64	0.00	0.00	0.00	0.00
1/25/2010	01:27:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	170.51	0.00	21.59	0.00	0.00	0.00	0.00
1/25/2010	01:27:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	166.28	0.00	25.55	0.00	0.00	0.00	0.00
1/25/2010	01:27:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.01	164.41	0.00	27.45	0.00	0.00	0.00	0.00
1/25/2010	01:27:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	166.84	0.00	27.73	0.00	0.00	0.00	0.00
1/25/2010	01:28:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	170.34	0.00	28.41	0.00	0.00	0.00	0.00
1/25/2010	01:28:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.95	168.74	0.00	29.45	0.00	0.00	0.00	0.00
1/25/2010	01:28:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.00	169.36	0.00	24.18	0.00	0.00	0.00	0.00
1/25/2010	01:28:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	167.67	0.00	27.04	0.00	0.00	0.00	0.00
1/25/2010	01:29:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.94	169.21	0.00	28.30	0.00	0.00	0.00	0.00
1/25/2010	01:29:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.96	170.75	0.00	23.77	0.00	0.00	0.00	0.00
1/25/2010	01:29:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	169.63	0.00	28.28	0.00	0.00	0.00	0.00
1/25/2010	01:29:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.97	169.79	0.00	26.22	0.00	0.00	0.00	0.00
1/25/2010	01:30:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.00	166.08	0.00	27.80	0.00	0.00	0.00	0.00
1/25/2010	01:30:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.92	168.71	0.00	26.85	0.00	0.00	0.00	0.00
1/25/2010	01:30:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.98	168.72	0.00	26.93	0.00	0.00	0.00	0.00
1/25/2010	01:30:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	8.99	167.93	0.00	21.90	0.00	0.00	0.00	0.00
1/25/2010	01:31:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	TST-003	9.03	163.49	0.00	25.15	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/25/2010	01:32:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.06	2.98	0.00	-4.13	0.00	0.00	0.00	0.00
1/25/2010	01:32:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	2.23	0.00	1.20	0.00	0.00	0.00	0.00
1/25/2010	01:32:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.05	1.95	0.00	3.74	0.00	0.00	0.00	0.00
1/25/2010	01:33:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	1.38	0.00	0.71	0.00	0.00	0.00	0.00
1/25/2010	01:33:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	1.91	0.00	2.77	0.00	0.00	0.00	0.00
1/25/2010	01:33:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	1.13	0.00	-0.59	0.00	0.00	0.00	0.00
1/25/2010	01:33:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.05	1.02	0.00	1.39	0.00	0.00	0.00	0.00
1/25/2010	01:34:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	15.37	0.00	2.52	0.00	0.00	0.00	0.00
1/25/2010	01:34:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.05	74.99	0.00	-1.98	0.00	0.00	0.00	0.00
1/25/2010	01:34:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	119.96	0.00	0.86	0.00	0.00	0.00	0.00
1/25/2010	01:34:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	123.96	0.00	0.57	0.00	0.00	0.00	0.00
1/25/2010	01:35:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.04	124.31	0.00	1.81	0.00	0.00	0.00	0.00
1/25/2010	01:35:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	9.03	109.40	0.00	-0.35	0.00	0.00	0.00	0.00
1/25/2010	01:35:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	12.60	45.06	0.00	1.60	0.00	0.00	0.00	0.00
1/25/2010	01:35:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	12.65	3.06	0.00	0.99	0.00	0.00	0.00	0.00
1/25/2010	01:36:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	12.65	1.90	0.00	0.87	0.00	0.00	0.00	0.00
1/25/2010	01:36:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	9.87	1.07	0.00	31.78	0.00	0.00	0.00	0.00
1/25/2010	01:36:40 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.28	1.47	0.00	127.88	0.00	0.00	0.00	0.00
1/25/2010	01:36:55 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.07	1.27	0.00	129.03	0.00	0.00	0.00	0.00
1/25/2010	01:37:10 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.08	1.46	0.00	125.34	0.00	0.00	0.00	0.00
1/25/2010	01:37:25 PM	Apollo Compressor Statio	MC1661	Caterpillar G3516 TALE	BIAS-004	0.06	1.03	0.00	127.55	0.00	0.00	0.00	0.00

EPA METHOD 7E
Calibration Data For Oxides of Nitrogen

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/25/10

Location: Apollo Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 600 CLD S/N: V09044

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN	X 100

RANGE: 241

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
ZERO	0.00	0.15%	0.360	NA	NA		NA	0.15%
LOW	124.00	52.64%	126.870	NA	NA		NA	1.19%
HIGH	241.00	100.63%	242.510	NA	NA		NA	0.63%
BIAS Zero	0.00	0.22%	0.520	0.28%	0.680		0.07%	0.13%
BIAS Cal	124.00	49.33%	118.880	50.36%	121.360		1.03%	-1.10%

RUN 2

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	0.28%	0.680	0.37%	0.880		0.08%	0.37%
BIAS Cal	124.0	50.36%	121.360	48.78%	117.560		-1.58%	-2.29%

RUN 3

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	0.37%	0.880	0.42%	1.020		0.06%	0.42%
BIAS Cal	124.0	48.78%	117.560	51.58%	124.310		2.80%	-1.06%

EPA METHOD 10
Calibration Data For Carbon Monoxide

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/25/10

Location: Apollo Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 602 S/N: V09042-M

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN	X 100

RANGE: 240

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
ZERO	0	-1.52%	-3.640	NA	NA		NA	-1.52%
LOW	124	53.50%	128.410	NA	NA		NA	1.84%
HIGH	240	101.96%	244.710	NA	NA		NA	1.96%
BIAS Zero	0	-2.54%	-6.090	-3.24%	-7.780		-0.70%	-2.54%
BIAS Cal	124	50.47%	121.120	51.38%	123.310		0.91%	-2.13%

RUN 2

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	-3.24%	-7.780	-1.86%	-4.460		1.38%	-1.86%
BIAS Cal	124.0	51.38%	123.310	52.68%	126.440		1.30%	-0.82%

RUN 3

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	-1.86%	-4.460	-1.72%	-4.130		0.14%	-1.72%
BIAS Cal	124.0	52.68%	126.440	53.76%	129.030		1.08%	0.26%

EPA METHOD 3A
Calibration Data For Oxygen

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/25/10

Location: Apollo Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 602 Oxyg S/N: V04056

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN / SPAN	X 100

RANGE: 20.9

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
ZERO	0	0.14%	0.030	NA	NA		NA	0.14%
LOW	12.4	60.10%	12.560	NA	NA		NA	0.77%
HIGH	20.9	100.48%	21.001	NA	NA		NA	0.48%
BIAS Zero	0	0.14%	0.030	0.14%	0.030		0.00%	0.14%
BIAS Cal	12.4	59.71%	12.480	60.10%	12.560		0.38%	0.00%

RUN 2

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
BIAS Zero	0	0.14%	0.030	0.19%	0.040		0.05%	0.19%
BIAS Cal	12.4	60.10%	12.560	60.29%	12.600		0.19%	0.19%

RUN 3

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
BIAS Zero	0	0.19%	0.040	0.19%	0.040		0.00%	0.19%
BIAS Cal	12.4	60.29%	12.600	60.29%	12.600		0.00%	0.19%

APPENDIX C
Sampling Log and Chain-of-Custody Records

Summary.log

MidCon Compression Emissions Test
Logged Files

Texas Midstream Gas Services
Apollo Compressor Station
Johnson County
Caterpillar G3516LE
MC1661
1/25/2010

ZER-001.DAT
CAL-001L.DAT
CAL-001H.DAT
M205QA.DAT
NOXCNV.DAT
BIAS-001.DAT
TST-001.DAT
BIAS-002.DAT
TST-002.DAT
BIAS-003.DAT
TST-003.DAT
BIAS-004.DAT

12:00 AM	12:00 AM	0.00
	Method 205	
	imported Data	
	imported Data	

APPENDIX D

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-410401 (REPLAC)
Project No.: 05-71892-001

Customer

AIR LIQUIDE AMERICA L.P.
MID CON
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM012248 **Certification Date:** 29Dec2008 **Exp. Date:** 29Dec2011
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
OXYGEN	12.4	%	+/- 1%	Direct NIST and NMI
NITROGEN	BALANCE			

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
CAI/110P/V03018	22Dec2008	PARAMAGNETIC

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

OXYGEN

Date: 29Dec2008	Response Unit:%	
Z1 = 0.00000	R1 = 23.20000	T1 = 12.44000
R2 = 23.20000	Z2 = 0.00000	T2 = 12.44000
Z3 = 0.00000	T3 = 12.44000	R3 = 23.21000
Avg. Concentration:	12.43	%

Second Triad Analysis

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4
r = 0.999999

Constants:	A = -0.00558057
B = 0.999821643	C = 0
D = 0	E = 0

APPROVED BY: _____
JEFF CROTEAU

MCET103016

Air Liquide America
Specialty Gases LLC

1290 COMBERMERE STREET, TROY, MI 48083

Phone: 248-589-2950 Fax: 248-589-2134

RATA CLASS

Dual-Analyzed Calibration Standard

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS53405
Project No.: 05-83115-007

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM036432 **Certification Date:** 22Dec2009 **Exp. Date:** 21Dec2012
Cylinder Pressure*:** 1938 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	124	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003744	240.8 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	03Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE

Date: 14Dec2009	Response Unit:PPM	
Z1 = -0.00815	R1 = 239.8695	T1 = 124.0575
R2 = 240.8978	Z2 = 1.01389	T2 = 124.2331
Z3 = 1.04257	T3 = 124.9736	R3 = 241.0968
Avg. Concentration:	124.2	PPM

Second Triad Analysis

Date: 22Dec2009	Response Unit: PPM	
Z1 = 0.02522	R1 = 241.1489	T1 = 124.5863
R2 = 241.3628	Z2 = 0.24930	T2 = 124.5967
Z3 = 0.41193	T3 = 124.7361	R3 = 241.4051
Avg. Concentration:	124.3	PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 9.99991E-1	
Constants:	A = 0.00000E+0
B = 5.13226E-1	C = 1.73000E-4
D = 0.00000E+0	E = 0.00000E+0

APPROVED BY: _____
Rob McCrandall

MCET103016

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS53405
Project No.: 05-83115-006

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM061287 **Certification Date:** 22Dec2009 **Exp. Date:** 22Dec2011
Cylinder Pressure*:** 1908 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITRIC OXIDE	124	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	124.	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1685	01Sep2010	KAL003486	247.1 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	21Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

NITRIC OXIDE

Date: 14Dec2009 Response Unit:PPM

Z1 = -0.47582	R1 = 489.6392	T1 = 124.5735
R2 = 490.8613	Z2 = 0.30170	T2 = 124.8282
Z3 = 0.63617	T3 = 125.3660	R3 = 491.1154
Avg. Concentration:	124.7	PPM

Second Triad Analysis

Date: 22Dec2009 Response Unit: PPM

Z1 = -0.04702	R1 = 246.4012	T1 = 123.2806
R2 = 246.7293	Z2 = 0.19058	T2 = 123.8694
Z3 = 0.24457	T3 = 124.1196	R3 = 246.8250
Avg. Concentration:	123.9	PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4
r = 9.99953E-1

Constants:	A = 0.00000E+0
B = 1.01662E+0	C = 2.63000E-4
D = 0.00000E+0	E = 0.00000E+0

APPROVED BY: _____
Rob McCrandall

MCET103016

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: ALAS53405

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-83115-008
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM060783 **Certification Date:** 22Dec2009 **Exp. Date:** 21Dec2012
Cylinder Pressure*:** 1967 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	240	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003744	240.8 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	03Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE

Date: 14Dec2009	Response Unit:PPM	
Z1 = -0.03818	R1 = 239.8696	T1 = 239.8361
Z2 = 240.8876	Z2 = 1.01389	T2 = 240.0863
Z3 = 1.04257	T3 = 240.1925	R3 = 241.0968
Avg. Concentration:	240.2	PPM

Second Triad Analysis

Date: 22Dec2009	Response Unit: PPM	
Z1 = 0.02522	R1 = 241.1489	T1 = 240.4506
R2 = 241.3628	Z2 = 0.24930	T2 = 240.5968
Z3 = 0.41193	T3 = 240.6071	R3 = 241.4051
Avg. Concentration:	240.0	PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 9.999916-1	
Constants:	A = 0.00000E+0
B = 6.132266-1	C = 1.73000E-4
D = 0.00000E+0	E = 0.00000E+0

APPROVED BY: _____
Rob McCrandall

MCET103016

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: X14-FMSUP MIDCON
Project No.: 05-79094-008

Customer

AIR LIQUIDE AMERICA
MIDCON
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL20813 **Certification Date:** 20Aug2009 **Exp. Date:** 20Aug2011
Cylinder Pressure*:** 1948 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITRIC OXIDE	241	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	241.	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1686	01Sep2010	KAL003496	490.0 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	07Aug2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

NITRIC OXIDE

Date: 13Aug2009	Response Unit: PPM	
Z1 = 0.01171	R1 = 489.2294	T1 = 241.4436
R2 = 489.0785	Z2 = 0.32282	T2 = 241.4695
Z3 = 0.67737	T3 = 241.7198	R3 = 490.3079
Avg. Concentration:	241.4	PPM

Date: 20Aug2009	Response Unit: PPM	
Z1 = 0.49305	R1 = 492.1086	T1 = 241.6823
R2 = 492.5323	Z2 = 0.79017	T2 = 242.2385
Z3 = 1.08541	T3 = 242.7447	R3 = 493.6700
Avg. Concentration:	240.5	PPM

Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 9.99990E-1	
Constants:	A = 0.00000E + 0
B = 9.74312E-1	C = 4.10000E-5
D = 0.00000E + 0	F = 0.00000E + 0

APPROVED BY: _____
Rob McCrandall

Page 1 of 1

Air Liquide America
Specialty Gases LLC

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: DAVID CROFOOT

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-80830-001
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA SPECIALTY GASES

C/O MIDCON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM058040 **Certification Date:** 24Sep2009 **Exp. Date:** 25Sep2011
Cylinder Pressure*:** 1800 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITROGEN DIOXIDE	49.4	PPM	+/- 2%	GMIS
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
GMIS NO2/AIR	03Dec2010	ALM058077	107.0 PPM	NITROGEN DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
AMETEK 921/921 CE NO2/AW-921-S281	18Sep2009	UV

APPROVED BY: _____
HILARY THATCHER

MCET103016

Air Liquide America
Specialty Gases LLC

Shipped From:
1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY

GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-82375-001
PO#: PURE STOCK
ITEM #: 0501841 AL
DATE: 13Nov2009

CYLINDER #: ALM034477
FILL PRESSURE: 02000 PSIG

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	0.5 PPM	< 0.5 PPM

ANALYST: ROBERT LESNIAK

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

Shipped From:
1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-82642-001
PO#: PURE STOCK
ITEM #: 0501030 AL
DATE: 04Dec2009

CYLINDER #: ALM45986
FILL PRESSURE: 02000 PSIG PRODUCT EXPIRATION: 03Dec2012

PURE MATERIAL: AIR CAS# 132259-10-0

GRADE: ACID RAIN CEM 0

PURITY: -

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	20 TO 21%	20 TO 21%

ANALYST:

APPENDIX E
Test Participants

TEST PARTICIPANT SIGN IN SHEET

CUSTOMER: Texas Midstream Gas Service
LOCATION: Apollo Compressor Station
SOURCE (S): G3514 LE
ADDRESS:

DATE: 1-25-10
PERMIT #:
COMPANY CONTACT: Hillary Moseley
PHONE #: ~~405~~ 405-935-4113

TEST CONTRACTOR: **MidCon Compression - Emissions Testing**

ADDRESS: 410 Marti Dr.
Cleburne Texas 76063

PHONE #: (817) 556-2462
FAX #: (817) 556-2678

NAME	AFFILIATION	ADDRESS AND PHONE NUMBER
Jeff Anderson	MidCon Compression - Emissions Testing	817-487-2837
Mark Hardy	Flintrak	903-815-9681

Curriculum Vitae

Jeff David Anderson

Education: Currently attending Hill college for degree in Industrial Matinance

Certifications: Certifications: Caterpillar Gas Engine Basics Caterpillar Gas I, Gas II ADEM III Waukesha ESM, Waukesha GET, EMIT AFR Controls Compliance Controls AFR9 training Altronic Controls EPC110

Qualifications: Mr. Anderson is an Emission Test Technician with experience in this capacity beginning in August 2008. He is thoroughly versed in SUA 40 CFR 60, Texas Commission on Environmental Quality (TCEQ) and New Mexico Air Quality Bureau Compliance and Performance test protocols. He is an expert in the calibration, operation and maintenance of all MidCons laboratory grade emission analysis equipment required to meet the above test protocols. Additionally, he is experienced in implementing the complex computer calculations to provide the necessary test reports. Mr. Anderson resume includes extensive testing of stationary spark and compression ignition engines as well as gas natural gas compressors.

His background experiences include:

MidCon Compression, LLC
Emission Technician

3 years experience Gas engine maintenance and operation.

1 year experience in Gas Engine Testing Methods.

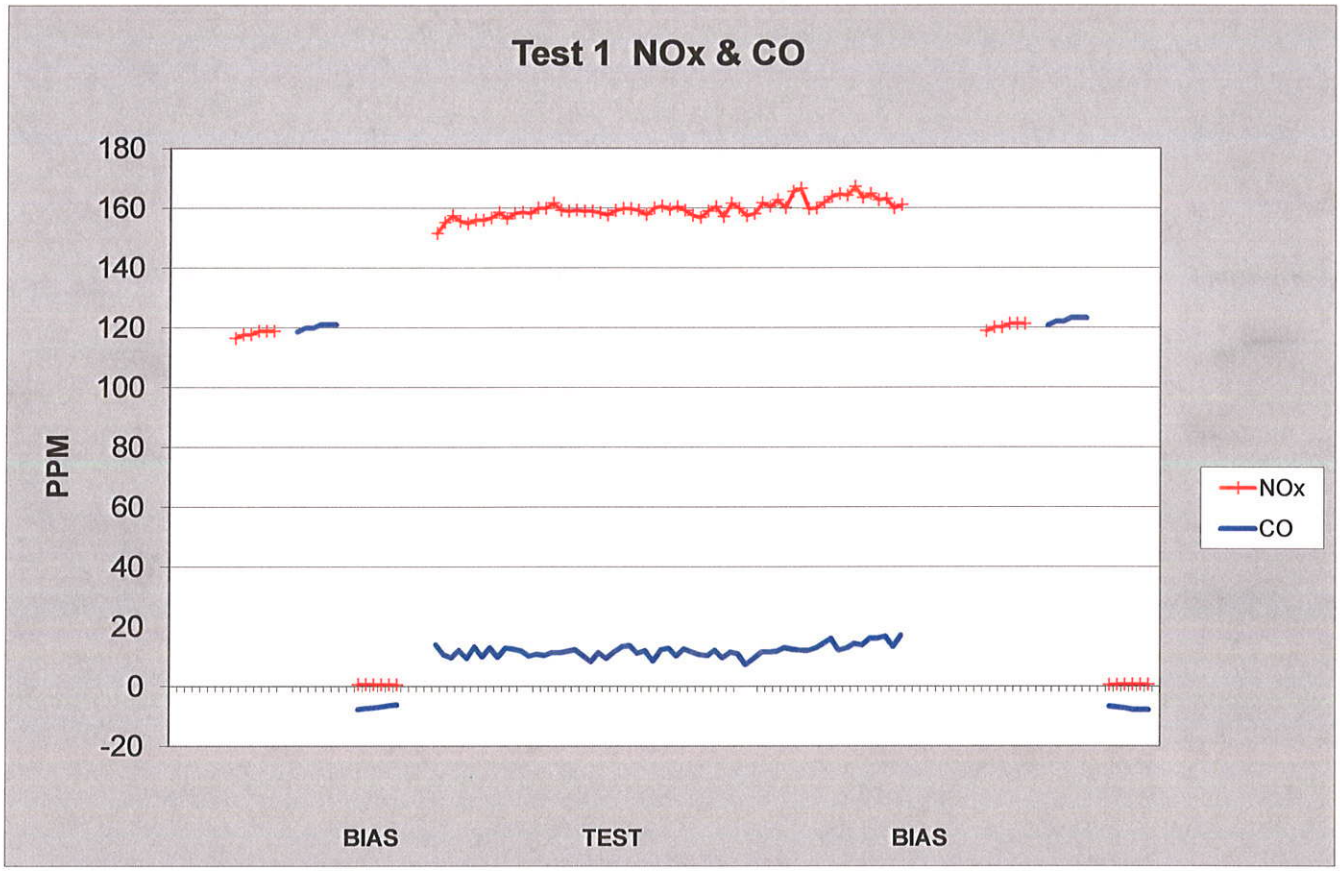
1 year automotive emissions testing S&H Auto Clinic 1995-1996

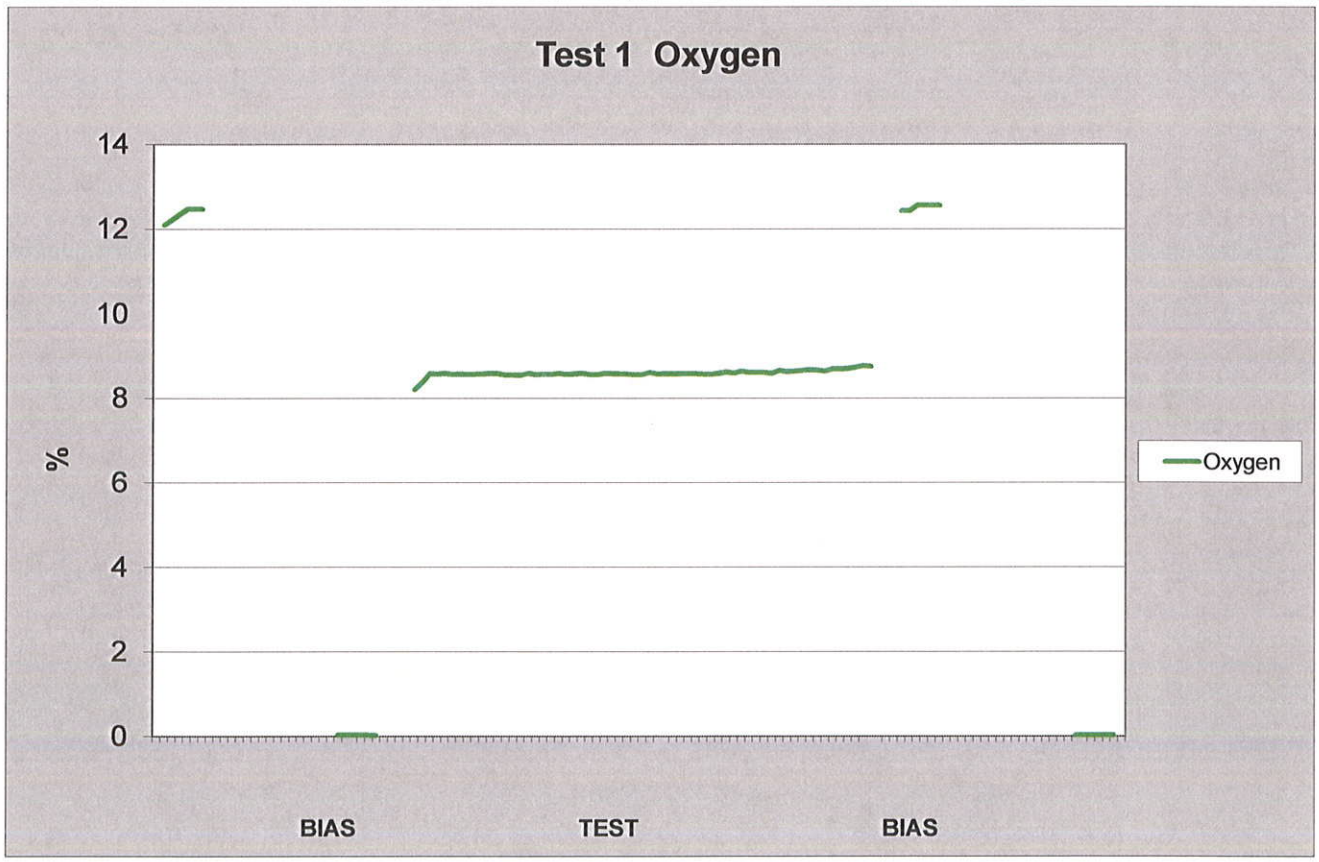
MidCon LLC. - Emissions Testing Tel#. 817-487-2837
410 Marti Dr.
Cleburne Texas
76033

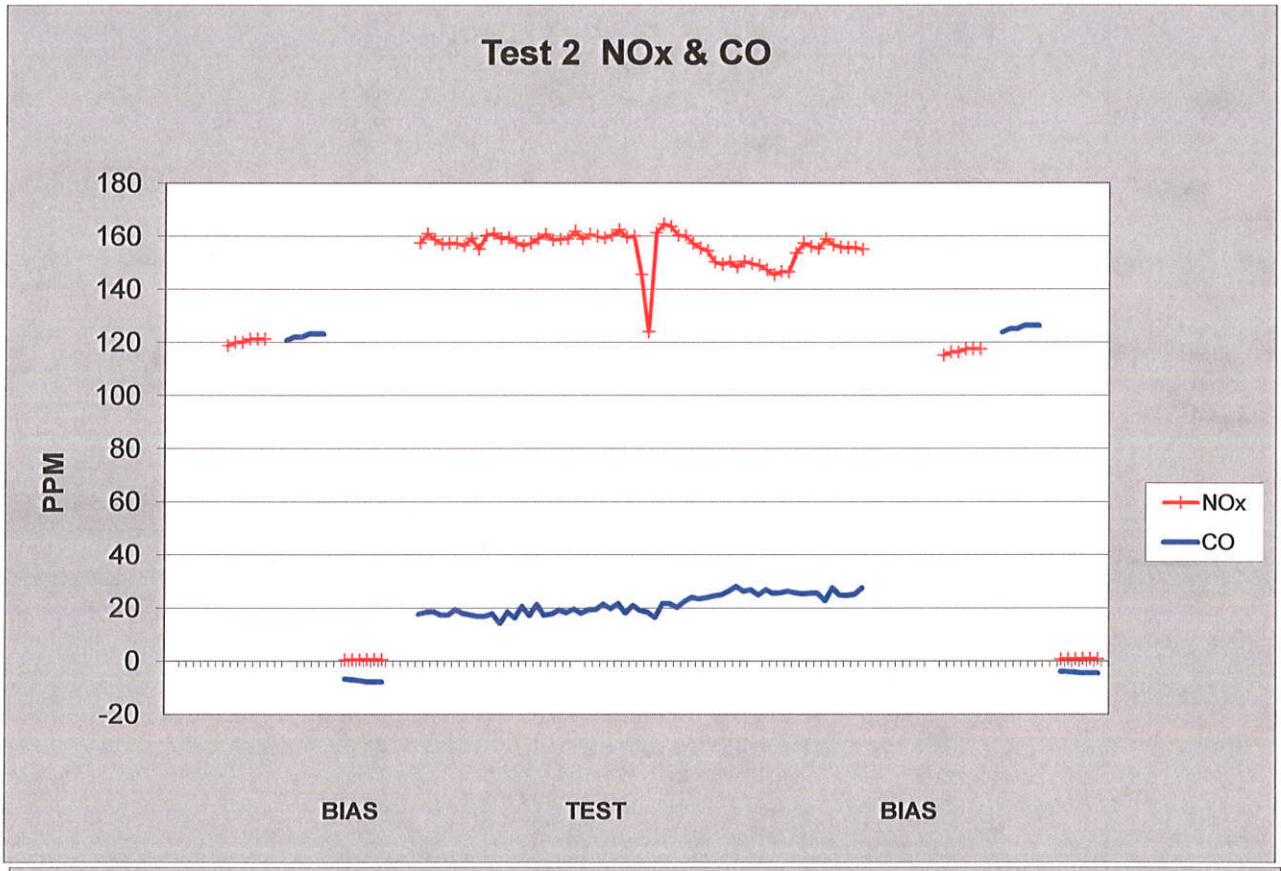
APPENDIX F
Additional Information

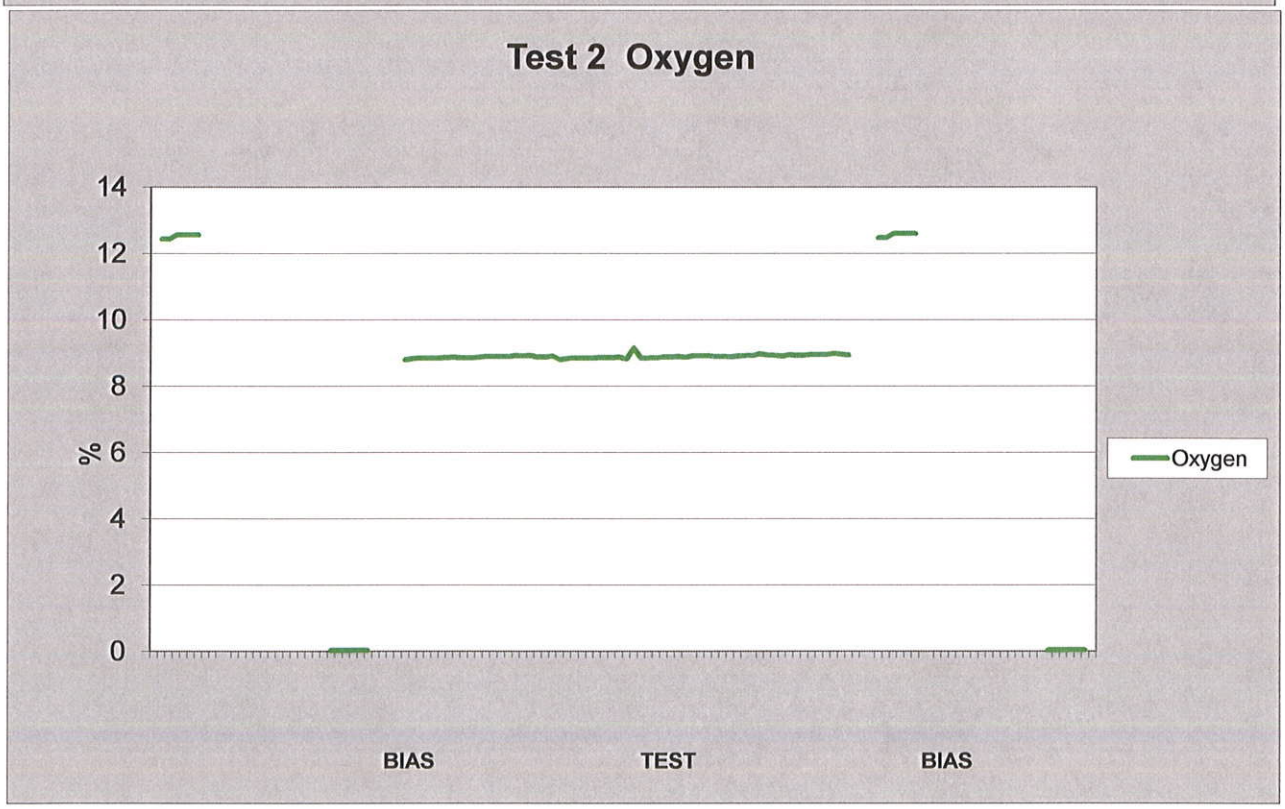
1/25/10
Apollo Compressor Station
Johnson County
Caterpillar G3516LE
MC1661
SOC

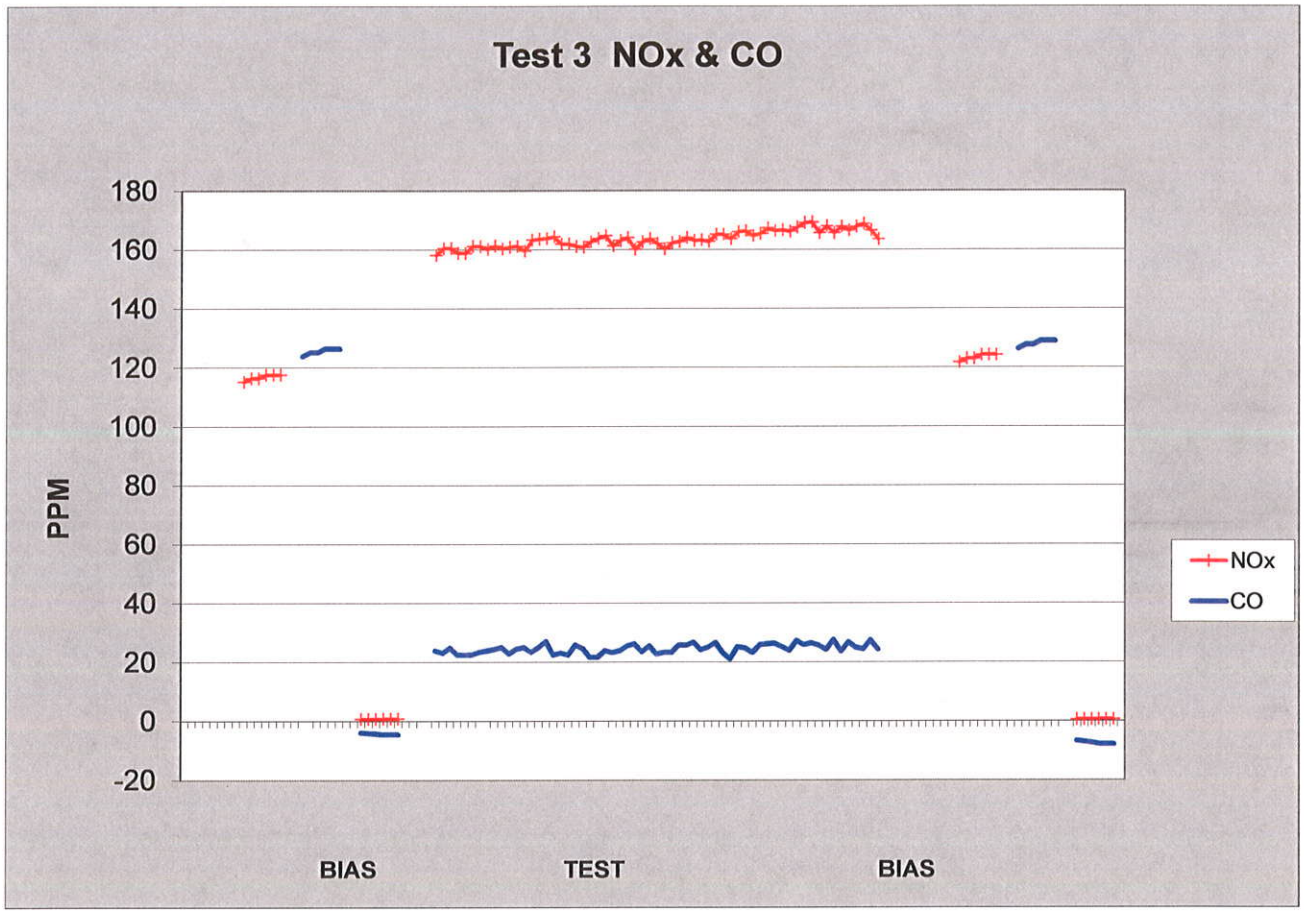
Time	10:00 AM	11:11 AM	12:23 PM
Run No.	TST-001	TST-002	TST-003
Operator	Jeff Anderson		
Ambient Temp	44	44	44
Dy Bulb	0	0	0
Wet Bulb	0	0	0
Ambient Pressure	29.13	29.13	29.13
Sample Source	Stack	Stack	Stack
Exh. Flow (DSCFH)	0	0	0
Fuel Rate (SCFH)	8660	8660	8660
BHP	1020	1020	1020
Ignition Timing	28	28	28
Engine RPM	1300	1300	1300
Boost Press.	0	0	0
Manifold Press.	27.9	32.5	32.4
Manifold Press. Scale	PSIA	PSIA	PSIA
Manifold Temp.	127	129	131
Fuel Header Press.	34	34	34
Suction Press. (psig)	120	150	160
Suction Temp. (F)	63	63	63
Discharge Press. (psig)	900	900	900
Discharge Temp. (F)	185	206	206
Capacity (MMSCFD)	10	10	10
**********	0	0	0
exh back press.	0	0	0
exh temp.	1145	1145	1145
convertor temp.	0	0	0
o2 sensor mv	0	0	0
convertor diff. Press.	0	0	0

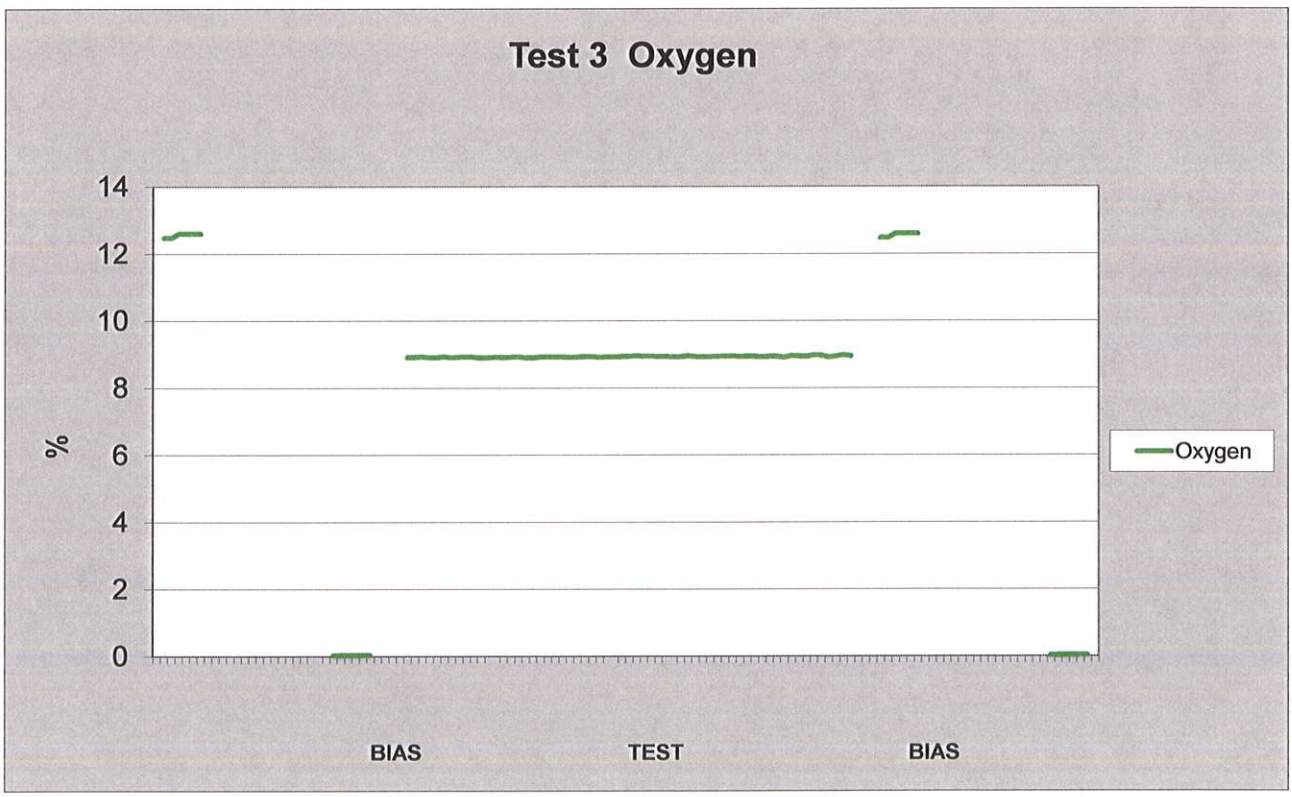

Test 1 NOx & CO
180
160
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 1 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen


Test 2 NOx & CO
180
160
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 2 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen


Test 3 NOx & CO
180
160
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 3 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen

Stack Sketch

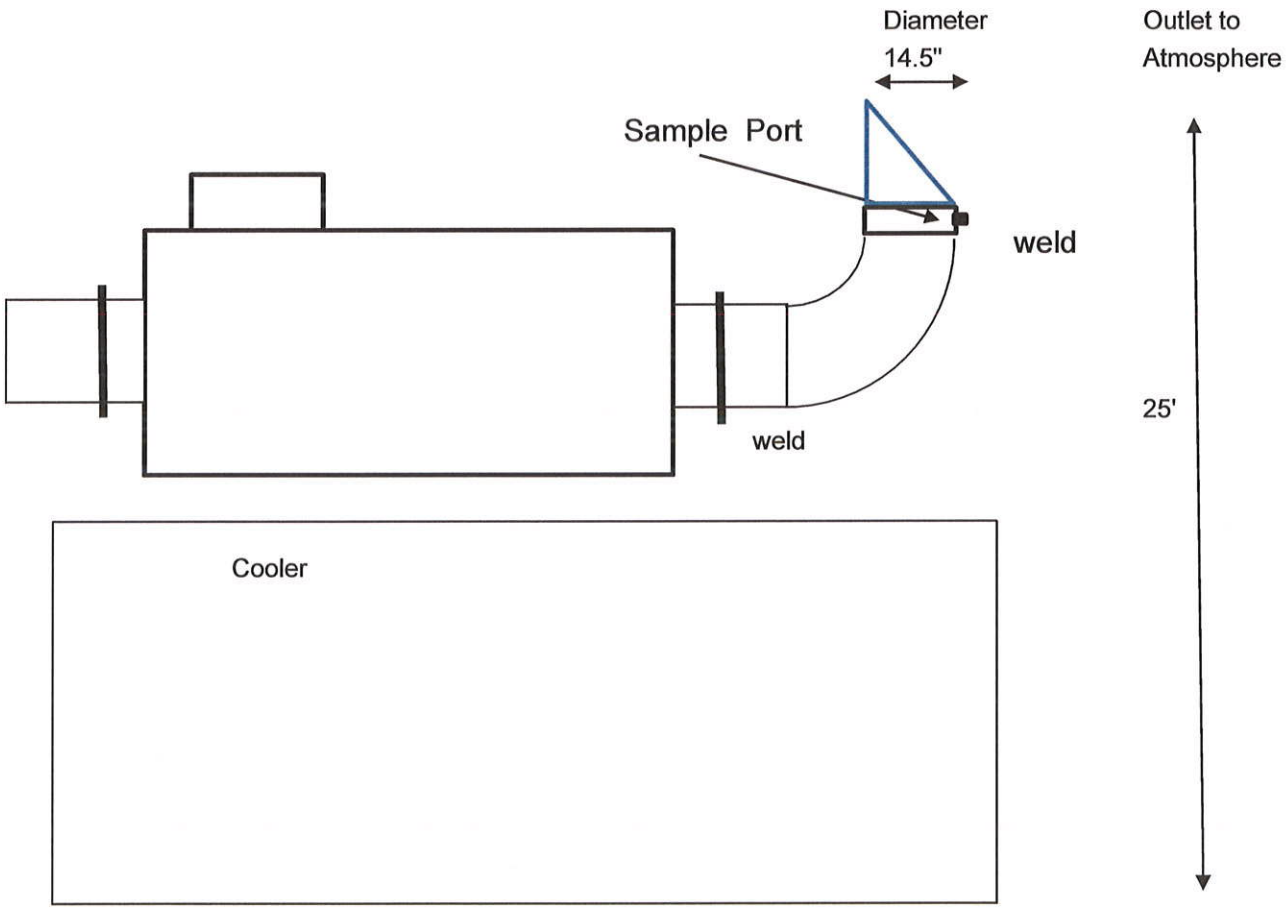
Customer : Texas Midstream Gas Service

Date : 1/25/2010

Location : Johnson County, Texas

Facility : Apollo Compressor Station

Unit : MC1661



Field Data Sheet

*Customer: Texas Midstream Gas Services *Date: 1-25-10

Address — * County, State: Johnson, TX

*Contact: Hilary Maseley Phone 405-935-6113

		TST-01	TST-02	TST 03	TST-04	TST-05
	Time	1000	1115	1316		
*	Facility	Apollo CS	Apollo CS	"		
*						
*	Source Make	Caterpillar	Caterpillar	"		
*	Source Model	G3516 LE	G3516LE	"		
*	Unit #	MC1661	MC1661	"		
*	Serial #	WPW00331	WPW00331	"		
**	Temperature	44	48 55	61		
	Amb. Press.	29.13	29.13	29.03		
***	Fuel Rate	8660	8660	8660		
***	BHP	~~971~~ 1020	1020	1020		
	Ign timing	28	28	28		
**	rpm	1300	1300	1300		
	boost	27.9				
**	manifold press	27.9	32.3	32.4		
**	manifold press scale	psi A	psia	psia		
**	manifold temp	127	129	131		
**	Fuel Hdr Press.	34	34	34		
**	Suction Press. (psig)	120	150	160		
	Suction Temp. (F)	63	63	~~63~~ 66		
**	Disch press	900	900	900		
	Disch Temp	~~185~~ 205	206	206		
**	Capacity	10.				
	Exh. Temp	1146	1146	1145		
**	Converter Temp					
**	O2 Sensor Reading					
	Presure Diff					
	Temperature Diff					
*	Leak Check					
*	Temps					
*	NOX Convertor					
	el'	892	892'	892'		
	High Gas	NOX	CO	OX		
	Mid Gas	NOX	CO	OX		
	Dilute 1					
	Dilute 2					
	High Gas					

* = manditory ** = Before end of Test 1 *** = Before Start of Test 1

600 Series
NDIR/O_2 Analyzer

NDIR/O2

DESCRIPTION

The California Analytical Models 601-2-3 NDIR/O2 digital analyzer product line is designed around a state of the art 16 bit microprocessor, with 16 digital inputs, 16 digital outputs, 16 analog inputs and 4 analog outputs. The analyzer can be manually operated from the keypad or remotely via TCP/IP, RS-232C communications and discrete inputs. The analyzer display includes screen presentation of all analyzer alarms. Four levels of password protection are provided. For precision measurements, the analyzer's accuracy is increased by entering calibration curve fit polynomials. Automatic calibration may be activated locally or remotely and includes auto calibration via preset times.

METHOD OF OPERATION—NDIR

The California Analytical Instruments' NDIR analyzer is based on the infrared absorption characteristics of gases. Using a single infrared beam to measure gas concentrations, this analyzer produces highly stable and reliable results. A single infrared light beam is modulated by a chopper system and passed through a sample cell of predetermined length containing the gas sample to be analyzed. As the beam passes through the cell, the sample gas absorbs some of its energy. The attenuated beam (transmittance) emerges from the cell and is introduced to the front chamber of a two-chamber infrared microflow detector. The detector is filled with the gas component of interest and consequently the beam experiences further energy absorption. This absorption process increases the pressure in both of the chambers. The differential pressure between the front and rear chambers of the detector causes a slight gas flow between the two chambers. This flow is detected by a mass-flow sensor and is converted into an output signal.

METHOD OF OPERATION - Oxygen

The California Analytical Instruments oxygen analyzer section utilizes either the paramagnetic or fuel cell method to determine the percent level of oxygen contained in the sample gas. The oxygen level is displayed on the LCD panel in percent concentration.

SPECIFICATIONS

IR Analysis Method: Non-Dispersive Infrared (NDIR)
NDIR Components: CO / CO_2 / CH_4 / C_3H_8 / SO_2
Detector Type: Microflow
NDIR Ranges: From 0-50* ppm up to 0-100%
*SO_2, CH_4, C_3H_8 0-250 ppm minimum
Range Ratio: 10:1
Response Time (IR): 90% of Full Scale in < 1 Second**
**Depending on Cell Length, Flow Rate, and Time Constant
IR Sample Cell: Stainless Steel w/ Replaceable gold cell liner
Resolution: Typically 0.1% of Full Scale
Repeatability: Better than 1.0% of Full Scale
Linearity: Better than 1.0% of Full Scale of Factory Calibrated Ranges
Noise: Less than 1% of Full scale of Factory Calibrated Ranges
Zero & Span Drift: Less than 1% of Full Scale per 24 Hours
Zero & Span Adjustment: Via front panel, TCP/IP or RS-232
Sample Flow Rate: 0.5 to 2.0 LPM
Oxygen Analysis Method: Paramagnetic or Fuel Cell
O_2 Ranges: 0-1% (Paramagnetic Only) up to 0-100% O2 Full Scale, Four Definable Ranges
O_2 Response Time: T90—2 Seconds Paramagnetic, 16 Seconds Fuel Cell

600 Series Features:

Outputs available: TCP/IP, RS232, Four Scalable Analog 0-10V / 4-20mA (Allows Offset & Expandable Range DC Analog Outputs)
Discrete Control: Remote/Local Control, Range Change, Range Sense Mode (All TTL Logic)
Discrete Alarms: (Local & Remote Adjustable)
General Fault/TTL Logic (Ground True)
Calibration Failure/TTL Logic (Ground True)
Concentration (2 Each) TTL Logic (Ground True)
Digital Diagnostics: Pressure – Pressure Control Voltages Temperatures – Flow Parameters
Keypad Displays: Factory Settings, TCP/IP address, Passwords(4), Scalable Analog Output Voltages, Full Scale Range Select, Auto Cal Times
Special Features: Auto Ranging, Data Streaming, Auto Calibration (adjustable through internal clock)
Display: 3" x 5" Back lit LCD
Sample Temperature: Up to 50° C, Non-condensing
Ambient Temperature: 5° to 40° C
Ambient Humidity: Less than 90% RH (Non-condensing)
Fittings: ¼ inch Tube
Power Requirements: 115/230 (+/- 10%) VAC; 50/60Hz, 300 watts maximum
Dimensions: 5¼"Hx19"Wx23"D
Weight: 30-45 lbs. (Depending on configuration)

Specifications subject to change without notice

CAI
1312 West Grove Avenue
Orange, CA 92865-4134
Phone: 714-974-5560 Fax: 714-921-2531
www.gasanalyzers.com

Chemiluminescent NO/NOx Analyzer

CLD/HCLD

DESCRIPTION

The California Analytical Instruments Model 600 HCLD NO/NOx digital analyzer is designed around a state-of-the-art 16-bit microprocessor. The 16 bit microprocessor control board consists of the MSR-Card with 16 digital inputs, 16 digital outputs, 16 analog inputs and 4 analog outputs. The analyzer can be manually operated from the keypad or remotely via TCP/IP, RS-232C communications and discrete inputs. The analyzer display includes screen presentation of all analyzer alarms. Four levels of password protection are provided. For precision measurements, the analyzer's accuracy is increased by entering calibration curve fit polynomials.
Automatic calibration may be activated locally or remotely and includes auto cal via preset times.

METHOD OF OPERATION

The California Analytical Model 600 HCLD Analyzer utilizes the principle of chemiluminescence for analyzing the NO or NOx concentration within a gaseous sample. In the NO mode, the method is based upon the chemiluminescent reaction between ozone and nitric oxide (NO) yielding nitrogen dioxide (NO2) and oxygen. This reaction produces light which has intensity proportional to the mass flow rate of NO2 into the reaction chamber. The light is measured by means of a photodiode and associated amplification electronics. In the NOx mode, NO plus NO2is determined as above, however, the sample is first routed through the internal NO2 to NO converter which converts the NO2 in the sample to NO. The resultant reaction is then directly proportional to the total concentration of NOx. Sample enters the analyzer directly into a heated chamber and is maintained at an elevated temperature. The moisture will remain in the vapor state, thus ensuring no loss of the NO2. Local operation is simplified using the 20 button alphanumeric keypad with data presented on a back lit LCD display. All local operations may be performed remote via RS-232 and/or TCP/IP.

SPECIFICATIONS

DETECTOR: Chemiluminescence (CLD) Photodiode (thermally stabilized with Peltier Cooler)
NO/NOx RANGES: 5 to 5,000 ppm NO/NO_X
(Four user programmable ranges)
RESPONSE TIME: Typically < 2 seconds to 90% Full Scale
REPEATABILITY: Better than 0.5% of Full Scale
LINEARITY: Better than 0.5% of Full Scale
NOISE: Typically less than 1% of Full Scale
ZERO & SPAN DRIFT: Less than 1% of Full Scale per 24 Hours
ZERO & SPAN ADJUSTMENT: Via front panel, TCP/IP or RS-232
NH_3 , HCN & SO_2 EFFECT: Not detectable with 100 ppm
CO_2 EFFECT: Less than 2.0% with 10% CO_2
H_2O EFFECT: Less than 0.8% total with chiller
FLOW CONTROL: Electronic Proportional Pressure Controller
SAMPLE FLOW RATE: Typically 1.5 to 2.5 LPM (0.6 LPM with low flow option)
CONVERTER: Vitreous Carbon Material @ 205°C >95% efficiency
OZONATOR: Ultraviolet Lamp
AIR OR O2 REQUIREMENTS: Less than 0.01 ppm NO_X at 240 cc/Min. @ 25 psig (Dew Point < -10°C)
NO/NO_x CONTROL: Manual/Remote/Auto Cycle
OUTPUTS AVAILABLE: TCP/IP, RS232,
Four Scalable Analog 0-10 V / 4-20 mA
DISCRETE ALARMS: (Local & Remote Adjustable)
General Fault/ TTL Logic (Ground True)
Calibration Failure/ TTL Logic (Ground True)
High Concentration (2 each)/ TTL Logic (Ground True)
DIGITAL DIAGNOSTICS: Control Voltages, Temperatures, Pressures, Flow Parameters
KEYPAD DISPLAYS: Factory Settings, TCP/IP Address, Passwords (4), Scalable Analog Output Voltages, Full Scale Range Select, Auto Cal Times
SPECIAL FEATURES: Calculated NO_2 derived from NO_X converter efficiency, Auto Ranging, Auto Calibration (adjustable through internal clock) Less than 3 cc Gold Plated Reaction Chamber
DISPLAY: 3" x 5" Back lit LCD
SAMPLE TEMPERATURE: Up to 50°C Noncondensing on CLD; 85-100°C on HCLD
OVEN TEMPERATURE: 85°C on HCLD; up to 100°C on request
AMBIENT TEMPERATURE: 5 to 40°C
AMBIENT HUMIDITY: Less than 90% RH Noncondensing
WARM-UP TIME: 1 Hour (Typical)
FITTINGS: 1/4 Inch Tube
POWER REQUIREMENTS: 115/230 (±10%) VAC; 50/60 Hz; 200 Watts (350 watts with pump)
DIMENSIONS: 5¼ H x 19 W x 23 D (Inches)
Weight: 45 lbs.

Specifications subject to change without notice.

CAI
1312 West Grove Avenue
Orange, CA 92865-4134
Phone: 714-974-5560 Fax: 714-921-2531
www.gasanalyzers.com

G3516 LE

GAS COMPRESSION APPLICATION

GAS ENGINE SITE SPECIFIC TECHNICAL DATA

CATERPILLAR®

ENGINE SPEED (rpm):	1300	FUEL SYSTEM:	HPG IMPCO WITH AIR FUEL RATIO CONTROL
COMPRESSION RATIO:	8:1		
AFTERCOOLER WATER INLET (°F):	130	**SITE CONDITIONS:**	
JACKET WATER OUTLET (°F):	210	FUEL:	Field Gas
COOLING SYSTEM:	JW+OC, AC	FUEL PRESSURE RANGE(psig):	35.0-40.0
IGNITION SYSTEM:	ADEM3	FUEL METHANE NUMBER:	62.2
EXHAUST MANIFOLD:	ASWC	FUEL LHV (Btu/scf):	1027
COMBUSTION:	Low Emission	ALTITUDE(ft):	500
NOx EMISSION LEVEL (g/bhp-hr NOx):	2.0	MAXIMUM INLET AIR TEMPERATURE(°F):	77
SET POINT TIMING:	27.4	NAMEPLATE RATING:	1340 bhp@1400rpm

			MAXIMUM RATING	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
RATING	**NOTES**	**LOAD**	**100%**	**100%**	**75%**	**54%**
ENGINE POWER	(1)	bhp	1244	1244	933	670
INLET AIR TEMPERATURE		°F	77	77	77	77
ENGINE DATA						
FUEL CONSUMPTION (LHV)	(2)	Btu/bhp-hr	7675	7675	7892	8280
FUEL CONSUMPTION (HHV)	(2)	Btu/bhp-hr	8481	8481	8721	9149
AIR FLOW	(3)(4)	lb/hr	11603	11603	8731	6388
AIR FLOW WET (77°F, 14.7 psia)	(3)(4)	scfm	2617	2617	1969	1441
INLET MANIFOLD PRESSURE	(5)	in Hg(abs)	67.4	67.4	53.1	40.2
EXHAUST STACK TEMPERATURE	(6)	°F	906	906	905	908
EXHAUST GAS FLOW (@ stack temp, 14.5 psia)	(7)(4)	ft3/min	7202	7202	5422	3983
EXHAUST GAS MASS FLOW	(7)(4)	lb/hr	12063	12063	9085	6655
EMISSIONS DATA						
NOx (as NO2)	(8)	g/bhp-hr	2.00	2.00	2.00	2.00
CO	(8)	g/bhp-hr	2.16	2.16	2.25	2.37
THC (mol. wt. of 15.84)	(8)	g/bhp-hr	2.40	2.40	2.48	2.60
NMHC (mol. wt. of 15.84)	(8)	g/bhp-hr	0.62	0.62	0.64	0.67
NMNEHC (VOCs) (mol. wt. of 15.84)	(8)(9)	g/bhp-hr	0.42	0.42	0.43	0.45
HCHO (Formaldehyde)	(8)	g/bhp-hr	0.22	0.22	0.21	0.22
CO2	(8)	g/bhp-hr	503	503	510	531
EXHAUST OXYGEN	(10)	% DRY	7.8	7.8	7.7	7.5
HEAT REJECTION						
HEAT REJ. TO JACKET WATER (JW)	(11)	Btu/min	41271	41271	34320	28846
HEAT REJ. TO ATMOSPHERE	(11)	Btu/min	4934	4934	4112	3416
HEAT REJ. TO LUBE OIL (OC)	(11)	Btu/min	6155	6155	5118	4302
HEAT REJ. TO AFTERCOOLER (AC)	(11)(12)	Btu/min	7899	7899	4880	1899

HEAT EXCHANGER SIZING CRITERIA			
TOTAL JACKET WATER CIRCUIT (JW+OC)	(12)	Btu/min	52784
TOTAL AFTERCOOLER CIRCUIT (AC)	(12)(13)	Btu/min	8294
A cooling system safety factor of 0% has been added to the heat exchanger sizing criteria.			

CONDITIONS AND DEFINITIONS

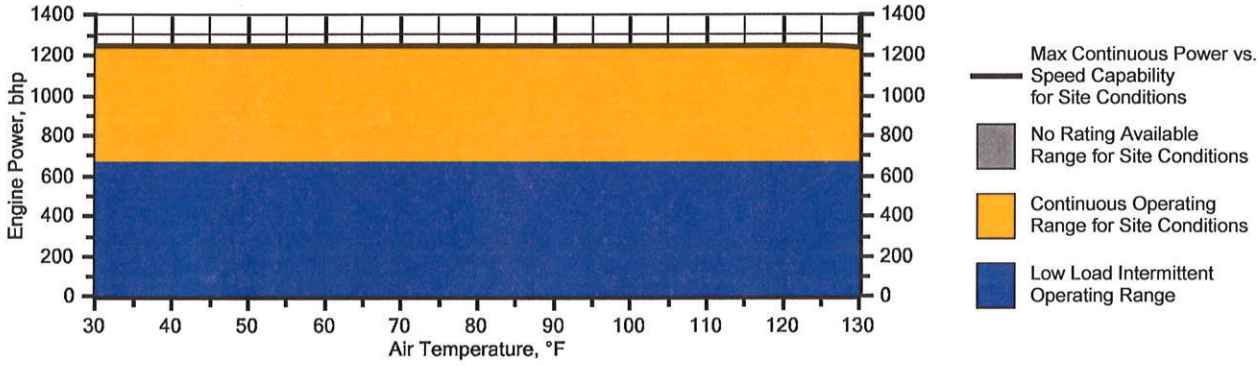
Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature.
100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature.
Max. rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature.
Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

PREPARED BY:
Data generated by Gas Engine Rating Pro Version 3.03.01
Ref. Data Set DM8618-01-001, Printed 25Jan2010

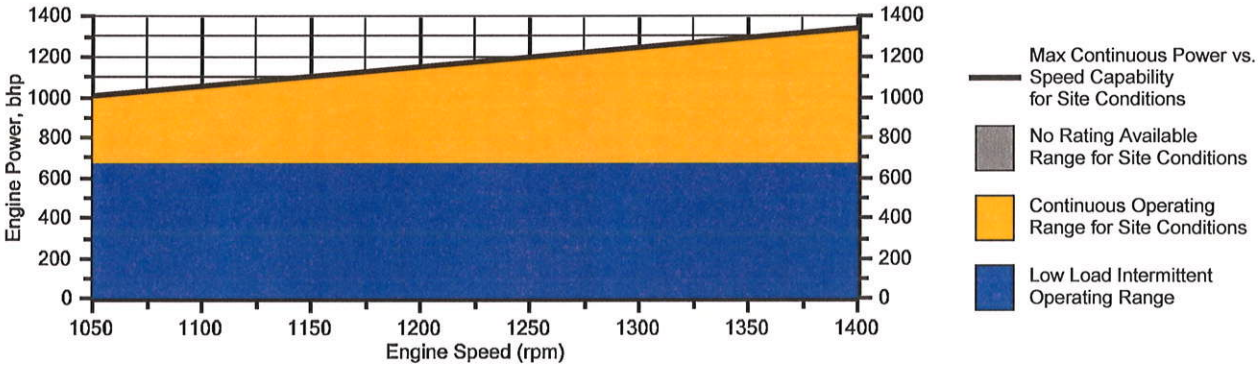
Engine Power vs. Inlet Air Temperature

Data represents temperature sweep at 500 ft and 1300 rpm



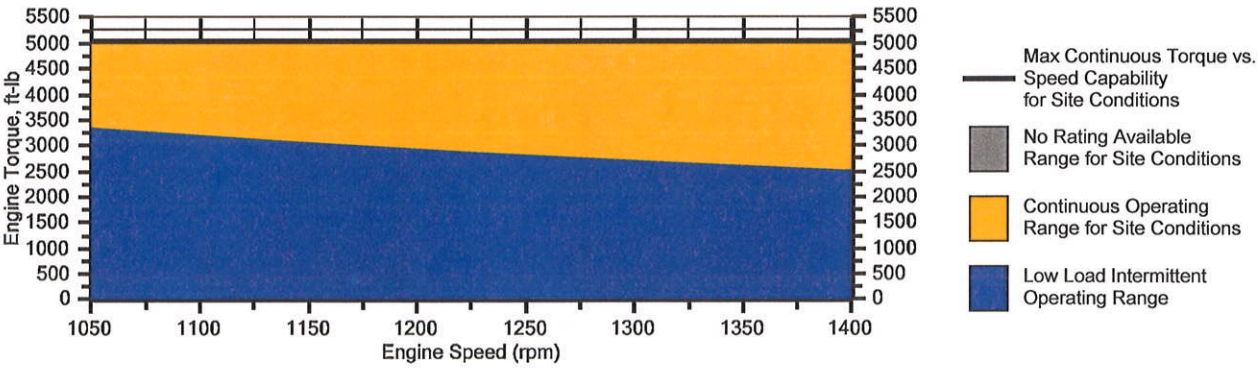
Engine Power vs. Engine Speed

Data represents speed sweep at 500 ft and 77 °F



Engine Torque vs. Engine Speed

Data represents speed sweep at 500 ft and 77 °F



Note: At site conditions of 500 ft and 77°F inlet air temp., constant torque can be maintained down to 1050 rpm. The minimum speed for loading at these conditions is 1050 rpm.

PREPARED BY:
Data generated by Gas Engine Rating Pro Version 3.03.01
Ref. Data Set DM8618-01-001, Printed 25Jan2010

Constituent	Abbrev	Mole %	Norm
Water Vapor	H2O	2.5211	2.5211
Methane	CH4	86.6340	86.6340
Ethane	C2H6	4.9767	4.9767
Propane	C3H8	3.5670	3.5670
Isobutane	iso-C4H1O	0.0000	0.0000
Norbutane	nor-C4H1O	1.8211	1.8211
Isopentane	iso-C5H12	0.0000	0.0000
Norpentane	nor-C5H12	0.4802	0.4802
Hexane	C6H14	0.0000	0.0000
Heptane	C7H16	0.0000	0.0000
Nitrogen	N2	0.0000	0.0000
Carbon Dioxide	CO2	0.0000	0.0000
Hydrogen Sulfide	H2S	0.0000	0.0000
Carbon Monoxide	CO	0.0000	0.0000
Hydrogen	H2	0.0000	0.0000
Oxygen	O2	0.0000	0.0000
Helium	HE	0.0000	0.0000
Neopentane	neo-C5H12	0.0000	0.0000
Octane	C8H18	0.0000	0.0000
Nonane	C9H20	0.0000	0.0000
Ethylene	C2H4	0.0000	0.0000
Propylene	C3H6	0.0000	0.0000
TOTAL (Volume %)		100.0000	100.0000

Fuel Makeup:	Field Gas
Unit of Measure:	English
Calculated Fuel Properties	
Caterpillar Methane Number:	62.2
Lower Heating Value (Btu/scf):	1027
Higher Heating Value (Btu/scf):	1135
WOBBE Index (Btu/scf):	1274
THC: Free Inert Ratio:	0
RPC (%) (To 905 Btu/scf Fuel):	100%
Compressibility Factor:	0.997
Stoich A/F Ratio (Vol/Vol):	10.68
Stoich A/F Ratio (Mass/Mass):	16.43
Specific Gravity (Relative to Air):	0.650
Specific Heat Constant (K):	1.297

CONDITIONS AND DEFINITIONS

Caterpillar Methane Number represents the knock resistance of a gaseous fuel. It should be used with the Caterpillar Fuel Usage Guide for the engine and rating to determine the rating for the fuel specified. A Fuel Usage Guide for each rating is included on page 2 of its standard technical data sheet.

RPC always applies to naturally aspirated (NA) engines, and turbocharged (TA or LE) engines only when they are derated for altitude and ambient site conditions.

Project specific technical data sheets generated by the Caterpillar Gas Engine Rating Pro program take the Caterpillar Methane Number and RPC into account when generating a site rating.

Fuel properties for Btu/scf calculations are at 60F and 14.696 psia.

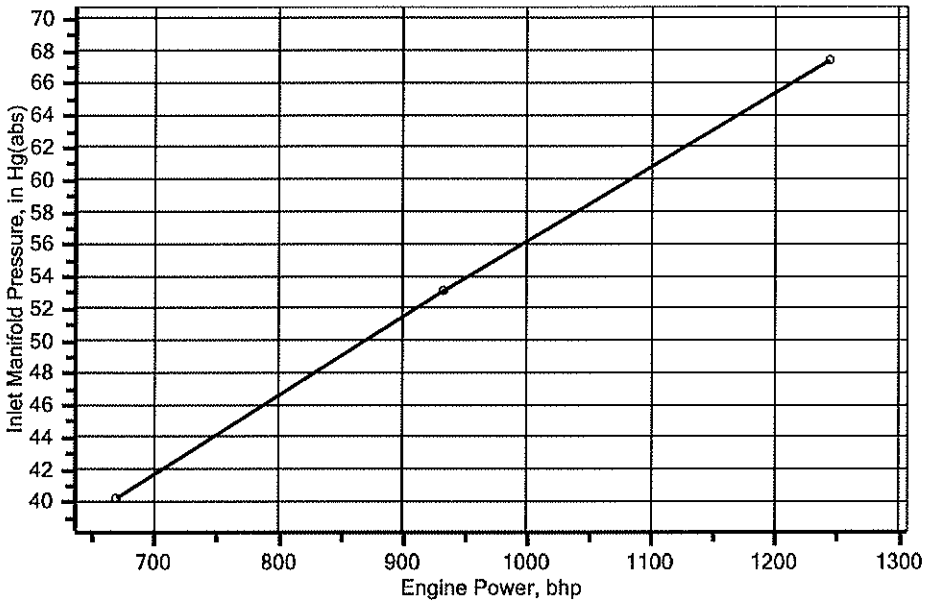
Caterpillar shall have no liability in law or equity, for damages, consequently or otherwise, arising from use of program and related material or any part thereof.

FUEL LIQUIDS

Field gases, well head gases, and associated gases typically contain liquid water and heavy hydrocarbons entrained in the gas. To prevent detonation and severe damage to the engine, hydrocarbon liquids must not be allowed to enter the engine fuel system. To remove liquids, a liquid separator and coalescing filter are recommended, with an automatic drain and collection tank to prevent contamination of the ground in accordance with local codes and standards.

To avoid water condensation in the engine or fuel lines, limit the relative humidity of water in the fuel to 80% at the minimum fuel operating temperature.

Engine Power vs. Inlet Manifold Pressure



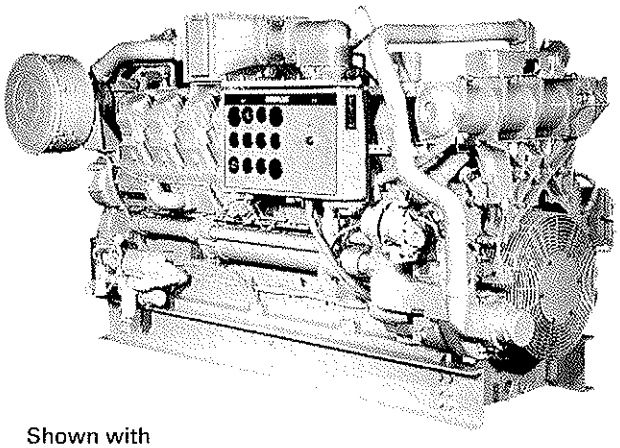
CATERPILLAR®

Gas Industrial Engine

G3516

660-1340 hp

Standard and Low Emission



Shown with
Optional Equipment

SPECIFICATIONS

V-16, 4-Stroke-Cycle, Spark Ignited

Bore—in (mm)	6.7 (170)
Stroke—in (mm)	7.5 (190)
Displacement—cu in (L)	4211 (69.0)
Compression Ratio	
STD	9:1
LE	8:1
Aspiration	Naturally Aspirated or Turbocharged-Aftercooled
Lube Oil Capacity — gal (L)	
STD*	153 (580)
STD**	171 (646)
LE	106 (402)
Jacket Water System — gal (L)	
Capacity w/o Radiator	53 (205)

* Oil fill capacity with 21 elements
**Oil fill capacity without elements

CATERPILLAR ENGINE FACILITIES ISO 9001 CERTIFIED

FEATURES

■ DIESEL STRENGTH

All Caterpillar® gas engines are built on diesel frames which means greater service life. Caterpillar gas engines inherit more from their diesel counterparts than just strength. They are backed by the same support system recognized as one of the most sophisticated and dependable in the world.

■ APPLICATION FLEXIBILITY

Broad operating speed range and ability to burn a wide spectrum of gaseous fuels.

■ LOW EMISSIONS

Low emission engines are capable of NO(x) levels as low as 2.0 grams/hp-hr. Lower emissions may be achievable for selected applications. Consult your Caterpillar dealer.

■ CATERPILLAR® GAS ENGINES

Represent the latest technology in engine design. Engines are offered in both naturally aspirated and turbocharged/aftercooled configurations.

TA is offered as standard and low emission. These different configurations offer:

- High energy ignition systems for consistent firing
- High efficient combustion chamber for complete burning of the fuel.
- Modern component design such as deep cup, oil gallery piston.

■ ELECTRONIC IGNITION SYSTEM WITH DETONATION SENSITIVE TIMING

The Caterpillar electronic ignition system provides optimized spark timing for all operating conditions. Timing is automatically controlled to maintain continuous detonation protection.

STANDARD EQUIPMENT

Air cleaners
  single stage, dry, with service indicator
Breather, crankcase
Carburetor
  natural gas
Cooler
  lubricating oil
Filter
  lubricating oil, RH
Flywheel housing
  SAE No. 00
Governor
  Woodward
Ignition system
  Altronic III
Instrument panel, RH
  8 gauge panel (STD)
  12 gauge panel (LE)
  oil pressure
  coolant temperature
  oil pressure differential
  intake manifold temp (TA only)
  pressure (LE)
  service meter
  exhaust pyrometer (LE)
Lifting eyes
Manifold, exhaust
  watercooled
Pumps, gear driven
  aftercooler water (TA only)
  jacket water
Rails, mounting, 10 in.
Regulator, gas pressure
SAE standard rotation
Thermostats and housing
Torsional vibration damper

OPTIONAL EQUIPMENT

Cooling systems
  high temp (LE only)
Exhaust fittings
Muffler
Power takeoffs
Starting systems
Tachometer
Low BTU arrangements
Landfill arrangements
Air head for 3161
CSA ignition
Air-to-air aftercooler connection

CONTINUOUS RATINGS (BHP)

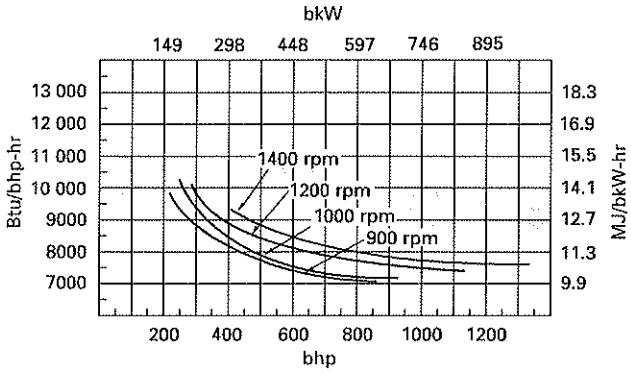
Aspiration	1400 rpm	1300 rpm	1200 rpm	1100 rpm	1000 rpm	900 rpm
LE-90	1340	1245	1150	1050	955	860
LE-130	1265	1175	1085	995	900	810
STD TA-90	–	–	1085	995	905	815
STD TA-130	–	–	1050	960	875	785
STD NA	–	–	660	605	585	525

PHYSICAL FACTORS

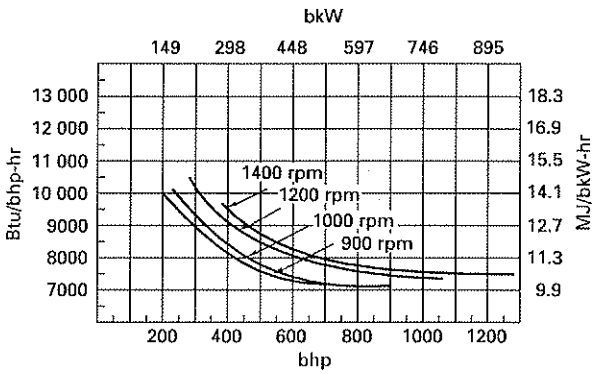
	Height in (mm)	Width in (mm)	Length in (mm)	Weight lb (kg)
LE	73.2 (1859)	67.1 (1703)	131 (3327)	17 670 (8022)
STD TA	73.2 (1859)	67.1 (1703)	131 (3327)	17 470 (7931)
STD NA	75.2 (1911)	61.6 (1564)	126.4 (3211)	16 400 (7446)

FUEL CONSUMPTION

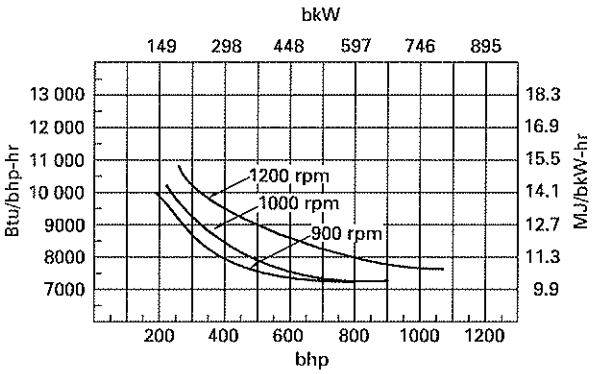
LE-90



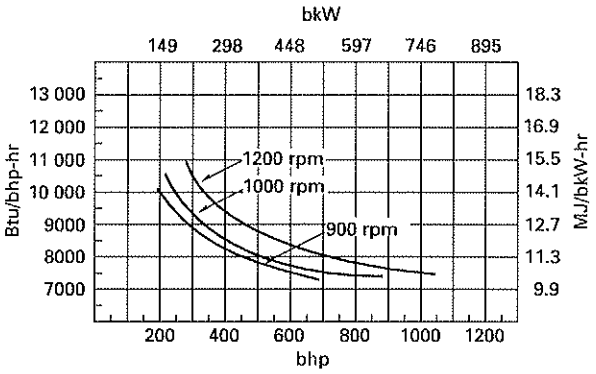
LE-130



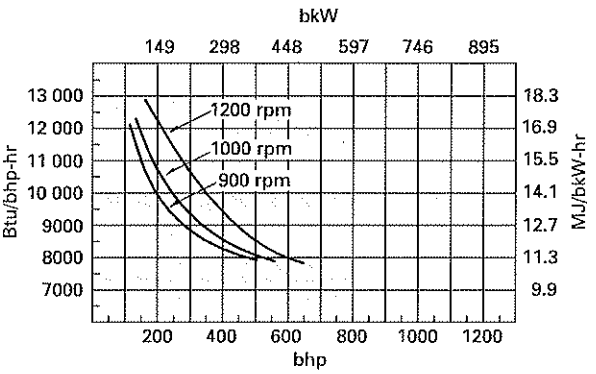
STD TA-90



STD TA-130



STD NA



LE refers to low emission engine configuration.
STD refers to standard engine configuration.
90 refers to aftercooler water inlet temperature in 90° F (32° C).
130 refers to aftercooler water inlet temperature in 130° F (54° C).
All data is based on standard conditions. 77° F (25° C) 500 ft Alt.
These ratings do not allow for overload capability.

DFW LABORATORIES
2440 Chambers Street, Suite A
Venus, TX 76084
PHONE (817) 539-2168
FAX (817) 539-2170

Certificate of Analysis

Number: 3040-2009110001-015A

Rick Rupard
Chesapeake Energy Marketing, Inc
411 Marti
Cleburne TX 76033
United States Of America

November 03, 2009

Sample ID:		Sampled By:	B. Emmons	
Station Name :	Apollo Discharge	Sample Of:	Natural Gas	Spot
Station Number :	6021416418	Sample Date:	10/28/2009	
Station Location :	Barnett Shale	Sample Conditions:	942.3 psig ,	@ 76.8°F
Sample Point:		PO / Ref. No:		
		Effective Date:		

ANALYTICAL DATA

Components	Mol %	Wt %	GPM at 14.730 psia	Method	Lab Tech.	Date Analyzed
				GPA-2261 M	LM	11/3/2009
Nitrogen	1.021	1.695				
Carbon Dioxide	1.561	4.072				
Methane	95.611	90.908				
Ethane	1.697	3.024	0.454			
Propane	0.094	0.246	0.026			
Iso Butane	0.009	0.031	0.003			
n-Butane	0.007	0.024	0.002			
Iso Pentane	0.000	0.000	0.000			
n-Pentane	0.000	0.000	0.000			
Hexanes***	0.000	0.000	0.000			
Heptanes***	0.000	0.000	0.000			
Octanes***	0.000	0.000	0.000			
	100.000	100.000	0.485			

	C2 +	C3 +	iC5 +
GPM TOTAL :	0.485	0.031	0.000

Relative Density	Real Gas	0.5836
Calculated Molecular Weight		16.87
Compressibility Factor		0.9979

Calculated Gross BTU per ft³ @14.730 psia & 60°F

Real Gas	Dry Basis	1003
	Saturated Basis	986

Comments :

h2s 2.2 ppm
Cylinder Number 212

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP or GPA guidelines for quality assurance, unless otherwise stated

A1/A1/CO 110034232168

421367

RECEIVE

MAR 3 2010

Air/Toxics & Inspection Coordination Branch 6EN-A

Chesapeake ENERGY

Regulatory Department

March 1, 2010

VIA CERTIFIED MAIL # 7009 0960 0000 6543 9787

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

Re: 30 TAC § 117 Results of Performance Testing
Texas Midstream Gas Services (TMGS)
Ponder Compressor Station – RN105354062

To Whom It May Concern:

Per 30 TAC § 117.2135(d)(9), TMGS is submitting the results of performance testing for unit MC1989, an affected facility as defined by 30 TAC § 117. The test report is enclosed. If you have any questions, please contact me at (405) 935-6113 or by email at hillary.moseley@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
EHS Coordinator
Chesapeake Energy

Enclosure: Test Report

cc: Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
12100 Park 35 Circle, Building C
Austin, Texas 78753
VIA CERTIFIED MAIL # 7009 0960 0000 6543 9794

Chesapeake Energy Corporation
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Austin, TX 78753
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MidCon COMPRESSION

Emissions Testing

EMISSIONS TEST REPORT

EPA 40CFR60 App. A Methods 3A, 7E, 10 and 19
OXIDES OF NITROGEN, CARBON MONOXIDE
EMISSION RESULTS

AT

Ponder Compressor Station

Denton County, Texas

for

Texas Midstream Gas Services

EMISSION SOURCE

Caterpillar G-3516-LE

1340-HP

Unit MC1989

S/N#WPW00883

TEST DATE

01/28/10

PREPARED BY

Jeff Anderson

MC_ET#103020

RECEIVE
MAR 3 2010
Air/Toxics & Inspection
Coordination Branch
6EN-A

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1.0 INTRODUCTION

1.1 SUMMARY OF TEST PROGRAM

MidCon LLC Emissions Testing Department conducted source emissions testing for Texas Midstream Gas Services at the Ponder Compressor Station in fulfillment of the performance test requirements of 30 TAC § 117 and 30 TAC § 106 and to demonstrate compliance with applicable permit emissions limits. Table 1 presents the emission units and emission species measured during the testing along with emission limits. The test was conducted in accordance with approved Environmental Protection Agency (EPA) test methods as described in the Code of Federal Regulations, Title 40 and Part 60 - Appendix A. The test date was January 28, 2010.

This report has been reviewed and to the best of my knowledge and belief, the information submitted, respectively, is true, accurate, and complete.

Jeff Anderson

Digitally signed by Jeff Anderson
Reason: I attest to the accuracy and integrity of this document
Location: MidCon Compression
Date: 2010.02.26 11:13:21 -06'00'

Jeff Anderson
MidCon LLC
410 Marti Dr.
Cleburne, TX. 76033
(817) 556-2462

Table 1: Emissions Units and Requirements

Unit Type	Emission Species	Applicable Limits
Caterpillar G-3516-LE Natural Gas Fired Engine Serial #WPW00883	NO_x	*0.7 gr/bhp/hr **1.5 g/bhp/hr
	CO	**0.380 gr/bhp/hr
*30 TAC § 117 **PBR Limits		

Facility:

Texas Midstream Gas Services
Ponder Compressor Station
Denton County, Texas

Contact:

Hillary Moseley
PO Box 18496 Oklahoma City
OK 73154-0162
405-935-6113

Emission Test Company:

MidCon LLC
Emission Testing
410 Marti Dr.
Cleburne, Texas 76033

Contact:

Jeff Anderson
Lab 124
(817)556-2462

2.0 SOURCE AND SAMPLING LOCATION DESCRIPTIONS

2.1 PROCESS DESCRIPTION

The Ponder Compressor Station is used to boost the pressure of sweet natural gas to a natural gas transportation system. Sweet natural gas from the inlet separator is compressed by three compressor engines. Compressor discharge exits the station.

2.2 CONTROL EQUIPMENT DESCRIPTION

This source is equipped with an Air to Fuel Ratio Controller and Catalyst reduction.

2.3 EXHAUST GAS AND PROCESS SAMPLING LOCATIONS

Emission sampling locations were located near the final exhaust. A stratification check utilizing CO was performed during Run 1. The concentration at each traverse point differed from the mean concentration of all traverse points by no more than 5 percent. For the remainder of the test runs, sampling was performed at the centroid of the stack.

The fuel sample was taken near the fuel meter run. The fuel is analyzed periodically at this location and results of the test sample were compared to previous samples for consistency. Published OEM fuel curves were used to determine fuel rates. The OEM publication is included in appendix F of this report.

The process parameters are monitored at the unit's control board. Production rates and quality are monitored at the stations final discharge meter. Pipeline gases are analyzed periodically by chromatograph for quality. Parameters pertaining to the sources process are included in Table 3-2.

3.0 SUMMARY AND DISCUSSION OF TEST RESULTS

3.1 OBJECTIVES AND TEST MATRIX

The test of MC1989 fulfills the performance test requirements of 30 TAC § 117 and 30 TAC § 106. The engine is authorized to operate under PBR 82981. The specific objectives are:

- Measure simultaneously the emissions of Oxygen, Carbon Monoxide and Oxides of Nitrogen at the exhaust stack of the natural gas source per the guidelines located in 40 CFR Pt. 60, Appendix A
- During the test period, obtain production rates, fuel rates and load indicating operating parameters.
- Obtain fuel chemistry.

Table 3-1 presents the sampling and analytical matrix.

TABLE 3-1. Ponder Compressor Station TEST MATRIX

Sampling Location	No. Of Runs	Sample/Type Pollutant[a]	Sampling Method[b]	Sampling Org	Sample Run Time (min)	Analytical Method[c]	Analytical Laboratory
Caterpillar G-3516-LE STACK 01/28/10	3	O_2/CO/NOx	M7E M19	MidCon	60	M3A NDIR (M10) M7E	Lab 124

[b] M - EPA Method, CEM - EPA Instrumental Method using continuous emission monitors.
[c] NDIR - Nondispersive infrared, FID - flame ionization detector, GC - gas chromatograph, HPLC - high performance liquid chromatography.

3.2 FIELD TEST CHANGES AND PROBLEMS

No significant problems occurred during the testing of this source.

3.3 PRESENTATION OF RESULTS

3.3.1 RESULTS

Table 3-2 shows the resulting values for the test matrix. This table includes process data and times. For raw data or data for individual test points, please see Appendix B.

Method / Component	Units	Run 1	RUN 2	RUN 3	AVG
Time	Start End	8:55 AM 9:57 AM	10:05 AM 11:07 AM	11:14 AM 12:16 PM	
Method 3A O_2	% Percent	8.44	8.46	8.42	8.44
Method 7E NO_X	ppmvd	99.93	99.28	85.73	94.98
	g/bhp/hr	0.63	0.62	0.54	**0.59**
Method 10 CO	ppmvd	55.95	56.09	56.55	56.20
	g/bhp/hr	0.21	0.21	0.22	**0.21**
Process Paramaters					
Load	BHP	1132	1132	1132	1132
Load *	%	84.48%	84.48%	84.48%	84.48%
Speed	RPM	1200	1200	1200	1200
Manifold Pressure	PSIA	32	32	32	32
Fuel Consumption	SCFH	8917	8917	8917	8917
Fuel Consumption (BSFC)	BTU(LHV)	7221	7221	7221	7221
Compressor Suction Pressure	PSI	400	400	408	402.67
Compressor Discharge Pressure	PSI	1044	1044	1046	1044.67
Compressor Volume	MMSCFD	15.34	15.34	15.34	15.34
Ambient Temperature	Deg. F	53.00	46.00	45.00	48.00
Ambient Pressure	In. Hg.	29.48	29.48	29.47	29.48

* as compared to maximum rated horsepower

3.3.2 FUEL ANALYSIS

A fuel specific F_d factor was calculated as described in EPA Method 19, "Determination of Sulfur Dioxide Removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates from Electric Utility Steam Generators" for natural gas. The following table 3-3, shows the F_d factor and heat values for the fuel sampled. See EPA 40CFR60 appendix A Method 20.7.2.1 and Method 19 Table 19-1 for natural gas F-factors.

Table 3-3

Fuel Gas Analysis							
Component i	Mole % Yi*100	MW	LHV BTU/FT^3	LHV*Yi BTU/FT^3	MW*Yi	HHV BTU/FT^3	HHV*Yi BTU/FT^3
Methane	93.681	16.043	913.0	855.308	15.029	1010	946.178
Ethane	2.955	30.070	1624.0	47.989	0.889	1769.6	52.292
Ethene	0.000	28.054	1499.1	0.000	0.000		
Propane	0.360	44.097	2322.0	8.359	0.159	2516.1	9.058
Propene	0.000	42.081	2182.1	0.000	0.000		
I-Butane	0.051	58.123	3010.0	1.535	0.030	3251.9	1.658
N-Butane	0.054	58.123	3020.0	1.631	0.031	3262.3	1.762
I-Pentane	0.016	72.150	3718.0	0.595	0.012	4000.9	0.640
N-Pentane	0.011	72.150	3706.8	0.408	0.008	4008.9	0.441
N-Hexane	0.007	86.177	4403.9	0.291	0.006	4755.9	0.314
N-Heptane	0.012	100.204	5100.3	0.632	0.012	5502.5	0.682
Nitrogen	0.532	28.013	0.0	0.000	0.149		
Oxygen	0.000	31.999	0.0	0.000	0.000		
Helium	0.000	4.003	0.0	0.000	0.000		
Carbon Dioxide	2.321	44.010	0.0	0.000	1.021		
Carbon Monoxide	0.000	28.010	320.5	0.000	0.000		
Hydrogen	0.000	2.016	273.8	0.000	0.000		
Hydrgen Sulfide	0.000	34.082	586.7	0.000	0.000		
Water Vapor	0.000	18.015	0.0	0.000	0.000		
		@293oK., 14.65 psia			Average MW		
Total	100.00	LHV Dry btu/ft^3		916.75	17.35	HHV	1013.025
			BTU /lb	22241.242			
			Fd factor	8631			

Carbon Mole Weight =	12.01115
Hydrogen Mole Weight =	1.00797
Oxygen Mole Weight =	15.9994
Nitrogen Mole Weight =	14.0067

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 EMISSIONS TEST METHODS

Sampling and analysis of the emission sources followed procedures outlined in the Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 3A, 7E, 10 and 19. Instrumental analyzers collected stack gas analyses for oxides of nitrogen, carbon monoxide and oxygen. Technical specifications and detection principles of these analyzers are listed on **Table 4** of this report.

The sampling and analysis system used during the test are shown on Figure 4. Stack gas travels to the analytical equipment via a 3/8" stainless steel probe through the three way Bias gas/sample valve (stainless steel) and enters a heated sample line where the sample gas is conducted through 3/8" Teflon tubing. The heated sample line maintains the sample gas temperature above 230° F. From the heated sample line, the sample gas is directed to a sample conditioner where water is condensed from the sample gas. From the sample conditioner, the sample gas enters the analyzers where the emission concentrations are measured on a dry basis. These concentrations are also recorded using an onboard data acquisition system, which provides documentation of emission measurements and instrument responses.

The test equipment used for this test series is laboratory grade instrumentation, which meets or exceeds all requirements of 40CFR60 test methods (**see table 4**). The test procedure and instrumentation materially complies with 40CFR60 Appendix A, Methods 3A, 7E, 10 and 19 practices adapted for use on internal combustion engines and turbines.

The exhaust gases were sampled continuously to determine NO_x, CO and O_2 concentrations for three runs at the unit's maximum achievable load at the time of the test. The maximum possible load was dependant on ambient and well conditions available during the test.

Fuel use for the source was determined by manufacturer published fuel curves.

Horsepower outputs were derived from engineering formulas. Engine and compressor parameters were entered into performance software commonly used in the gas industry. A printout of the initial test run is also included in appendix F.

The data acquisition system scanned the analyzers multiple times per second during the test run. The computer averaged the outputs every minute. This raw data is included in the APPENDICES.

TABLE 4

MidCon LLC
Cleburne, Texas (817)-556-2462
MOBILE EMISSIONS LAB
EQUIPMENT SPECIFICATIONS
- SPECIFICATIONS SHOWN DENOTE MAXIMUM DEVIATIONS-

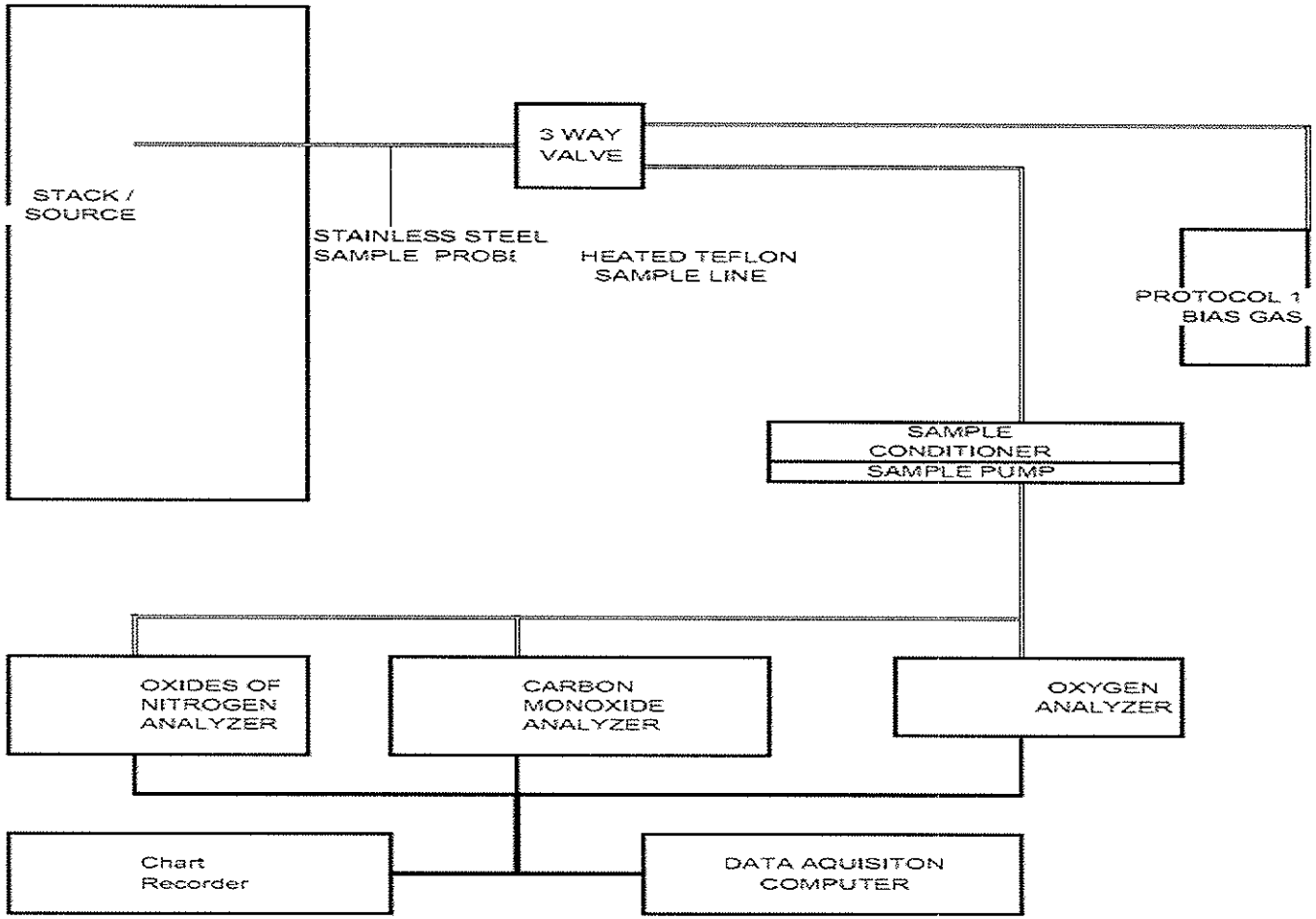
California Analytical ANALYZER	RANGE, min/max (1)	SENSITIVITY	LINEARITY	ACCURACY	RESPONSE TIME (instr)	INTERFR. RESP.
OXYGEN #602	0-1% --> 0-25%	<0.5% FS	< 1% see curves	±2% FS	90% -30 sec	< 1%
NOx #600 CLD	0-10 ppm --> 0-10 kppm	<1% LR	<1% Rng. see curves	±1%FS	90% - 1 sec	< 1%
CO #602	0-1.25 kppm --> 0-5 kppm (2)	<1% LR	±2% FS see curves	±2% FS	90% - 5 sec	CO2 Rej > 2500:1(5)

Note 1. Ranges may be electronically attenuated to provide specific custom ranges for particular applications.

Note 2. CO high range may be extended to approx. 0 - 20 kppm using background zero gas dilution flows.

Note 3. Sample conditioning system assures dry sample - dew point < -70°F, H2O Rejection Ratio N/A

Figure 4 - Sample Schematic



4.2 PROCESS TEST METHODS

Engine and compressor data were taken from the stations control panel. Multiple points were averaged for each test. Ambient conditions were recorded on the test trailer data acquisition computer. The fuel sample was taken prior to the test date.

4.3 SAMPLE IDENTIFICATION AND CUSTODY

For this test series all samples were processed real time and do not require a chain of custody. All tests were sequential and files numbered accordingly. Data points include time and date stamps.

5.0 QA/QC ACTIVITIES

5.1 QA/QC System Checks

Analyzer calibration data can be found in Appendix B.
Calibration Gas analysis can be found in Appendix D.
An OEM fuel curve may be found in Appendix F.

Sample line Leak Check

Condenser Drained	X
Inlet Temp	241
Outlet Temp	39
Start Vacuum	-16
End Vacuum	-16
Duration(secs)	60

Response Time

Date : 1/28/2010

Upscale Gas Concentrations		Analyzer Span Settings	
NO	124	NO	241
CO	124	CO	240

UPSCALE : Seconds

	NOx	CO
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
Avg upscale Time :	< 1 minute	< 1 minute

DOWNSCALE : Seconds

	NOx	CO
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
	< 1 minute	< 1 minute
Avg downscale Time :	< 1 minute	< 1 minute

Date: 1/28/10

NOx Converter Check Data

NO Calibration Gas Value 124 NO2 Calibration Gas Value 49.4

Instrument Readings
NOx, ppmv
(3 minute averages)

	Pre Cal	Converter Check
Zero	0.3	
NO cal	126.41	
Test NOx mode		47.40
NO2 Observed		47.10
Percent Efficiency		93.53%

Percent Eff = corrected Test NOx mode reading / NO2 Value
(MINIMUM = 90%)

5.2 QA AUDITS

Analyzers were calibrated and checked with EPA Protocol 1 calibration gases.
No captured samples will be collected for this test series and no other sample audits are required.

APPENDICES

Appendix A

Calculations

EPA Method 19 O2 "F" Factor Dry Basis Calculations Per Fuel Gas Analysis

(40CFR60APP.A,Meth.19 Equation 19-13)

O2Fd	=	O2 F factor (dry) SCF/million BTU
K	=	Conversion factor (1,000,000 BTU)
Khd	=	3.64 SCF of exhaust / lb of hydrogen burned / (% hydrogen)
Kc	=	1.53 SCF of exhaust / lb of carbon burned / (% carbon)
Ks	=	0.57 SCF of exhaust / lb of sulphur burned / (% sulphur)
Kn	=	0.14 SCF of exhaust / lb of nitrogen burned / (% nitrogen)
Ko	=	0.46 SCF of exhaust / lb of oxygen burned / (% oxygen)
GCV	=	Gross caloric value of the fuel based on fuel gas analysis in BTU/lb
GCV	=	22241

% of fuel gas which is made up of the following elements

H	=	23.07 %
C	=	71.79 %
S	=	0.00 %
N	=	0.86 %
O	=	4.28 %

$$O2Fd = \frac{[(Khd \times H) + (Kc \times C) + (Ks \times S) + (Kn \times N) - (Ko \times O2)] \times 1000000}{GCV}$$

O2Fd =[(3.64 x 23.069834) + (1.53 x 71.789281) +

(0.57 x 0) + (0.14 x 0.8591819) -

(0.46 x 4.2817027)] x 1000000 / 22241.242

O2Fd = [83.974 + 109.8376 +

0 + 0.12028547 -

1.9696] x 1000000 / 22241.24

O2Fd = 8631

legend

EPA METHOD 19 MASS EMISSION CALCULATIONS (DRY)

R	=	Fuel Consumption- Amount Of BTU's Consumed In One Hour		
F	=	EPA "F" Factor (Method 19)	=	8631
PPMVD	=	PPM Volume Of Emittant Dry In Engine Exhaust		
%O2	=	Measured % Of Excess Net Oxygen In Engine Exhaust		
L	=	Ideal Gas Law = 385.4 SCF Of Any Gas Per One lb-mole (40CFR60APP.A,Meth.17.6.2)		
E	=	Engine Fuel Efficiency (BTU/BHP/hr) (HHV)		
SCFH	=	Stard Cubic Feet per Hour		
SCFM	=	Stard Cubic Feet per Minute		
FC	=	Fuel Gas Consumption in Standard Cubic Feet per Hour		
EHP	=	Engine Horsepower		
BTUF	=	BTU Content (HHV) of Fuel Gas	=	1013.0252

measurements

		%O2	PPMVD CO	PPMVD NOx	FC	EHP
RUN 1	=	8.438	56.0	99.9	8917	1132
RUN 2	=	8.459	56.1	99.3	8917	1132
RUN 3	=	8.425	56.6	85.7	8917	1132

Fuel Flow Calculations

R = FC × BTUF / 1000000 = MMBTU/HR

E = FC × BTUF / EHP = BTU(HHV) BHP/Hr

	FC	BTUF			FC	BTUF		
R = RUN 1	8917	1013.0252 / 1000000	=	9.0331				
E = RUN 1	8917	1013.0252 / 1132	=	7980				
R = RUN 2	8917	1013.0252 / 1000000	=	9.0331				
E = RUN 2	8917	1013.0252 / 1132	=	7980				
R = RUN 3	8917	1013.0252 / 1000000	=	9.0331				
E = RUN 3	8917	1013.0252 / 1132	=	7980				

Exh Flow Calculatons (DRY)

SCFH = R × F × 20.9 / (20.9 - %O2) = SCFH Stack Flow

SCFM = SCFH / 60 = SCFM Stack Flow

	R	F	20.9 / (20.9 - %O2)		SCFH	SCFH	60		SCFM
SCFH = RUN 1	9.0331	8631	20.9 / 12.462	=	130753				
SCFM = RUN 1						130753	60	=	2179
SCFH = RUN 2	9.0331	8631	20.9 / 12.441	=	130971				
SCFM = RUN 2						130971	60	=	2183
SCFH = RUN 3	9.0331	8631	20.9 / 12.475	=	130616				
SCFM = RUN 3						130616	60	=	2177

EMISSION CALCULATIONS

	LBS/HR					Tons/Year				
lbs/hr =	SCFH	PPMVD / 1000000	MW / L	=	lbs/Hr	lbs/hr	24 / 2000	365	=	Tons/Year
NOx RUN 1	130753	99.926187 / 1000000	46 / 385.4	=	NOx 1.56 Lbs/Hr	1.56	24 / 2000	365	=	NOx 6.83 Tons/Year
NOx RUN 2	130971	99.284704 / 1000000	46 / 385.4	=	NOx 1.55 Lbs/Hr	1.55	24 / 2000	365	=	NOx 6.80 Tons/Year
NOx RUN 3	130616	85.731218 / 1000000	46 / 385.4	=	NOx 1.34 Lbs/Hr	1.34	24 / 2000	365	=	NOx 5.86 Tons/Year
CO RUN1	130753	55.953826 / 1000000	28 / 385.4	=	CO 0.53 Lbs/Hr	0.53	24 / 2000	365	=	CO 2.33 Tons/Year
CO RUN 2	130971	56.090847 / 1000000	28 / 385.4	=	CO 0.53 Lbs/Hr	0.53	24 / 2000	365	=	CO 2.34 Tons/Year
CO RUN 3	130616	56.551045 / 1000000	28 / 385.4	=	CO 0.54 Lbs/Hr	0.54	24 / 2000	365	=	CO 2.35 Tons/Year

grm/BHP/hr

	E	F / 1000000	20.9 / 20.9 - %O2	PPMVD / 1000000	MW / L	453.6		
g/BHP/hr =								
NOx g/BHP/hr = RUN 1	7980	8631	20.9	99.926187	46	453.6	=	0.63
		1000000	20.9 - %O2	1000000	385.328			
NOx g/BHP/hr = RUN 2	7980	8631	20.9	99.284704	46	453.6	=	0.62
		1000000	20.9 - %O2	1000000	385.328			
NOx g/BHP/hr = RUN 3	7980	8631	20.9	85.731218	46	453.6	=	0.54
		1000000	20.9 - %O2	1000000	385.328			
CO g/BHP/hr = RUN 1	7980	8631	20.9	55.953826	28	453.6	=	0.21
		1000000	20.9 - %O2	1000000	385.328			
CO g/BHP/hr = RUN 2	7980	8631	20.9	56.090847	28	453.6	=	0.21
		1000000	20.9 - %O2	1000000	385.328			
CO g/BHP/hr = RUN 3	7980	8631	20.9	56.551045	28	453.6	=	0.22
		1000000	20.9 - %O2	1000000	385.328			

APPENDIX B

Raw Field Data and Calibration Data Sheets

ANALYZER READINGS PER ONE MINUTE INTERVAL

(uncorrected)

Traverse Points		RUN1 COppm	RUN1 NOXppm	RUN1 O2%		RUN2 COppm	RUN2 NOXppm	RUN2 O2%		RUN3 COppm	RUN3 NOXppm	RUN3 O2%
	1	52.72	97.28	8.47	1	54.15	102.95	8.45	1	53.66	90.37	8.49
	2	54.36	100.08	8.45	2	53.23	101.17	8.42	2	52.15	80.70	8.49
	3	53.22	101.86	8.44	3	52.38	105.71	8.40	3	52.97	80.25	8.50
	4	52.14	102.61	8.38	4	52.55	103.90	8.44	4	51.80	81.90	8.50
	5	54.28	102.49	8.41	5	53.95	86.77	8.53	5	53.34	90.50	8.46
	6	54.30	97.03	8.47	6	52.56	96.04	8.48	6	52.34	87.27	8.41
	7	52.33	102.64	8.45	7	52.59	96.34	8.46	7	52.06	82.84	8.52
	8	53.05	95.70	8.45	8	55.00	101.68	8.46	8	52.05	82.38	8.46
	9	53.80	98.86	8.46	9	52.87	105.04	8.37	9	53.83	88.83	8.42
1	10	53.82	103.55	8.40	10	51.05	103.01	8.44	10	52.99	87.43	8.42
	11	53.31	102.51	8.40	11	53.38	95.47	8.51	11	54.18	88.11	8.48
	12	53.60	104.66	8.37	12	53.09	104.16	8.43	12	53.33	93.58	8.43
	13	53.88	104.72	8.46	13	52.75	104.94	8.42	13	53.83	85.56	8.46
	14	53.65	97.56	8.44	14	51.84	97.40	8.54	14	53.08	83.67	8.47
	15	52.55	96.27	8.44	15	52.36	96.73	8.51	15	53.13	87.07	8.44
	16	52.84	100.82	8.45	16	53.78	96.15	8.49	16	53.40	85.88	8.52
	17	53.89	100.20	8.46	17	53.41	99.09	8.48	17	51.92	86.92	8.42
	18	54.06	100.82	8.45	18	53.92	101.12	8.44	18	52.29	88.24	8.45
	19	52.53	100.76	8.45	19	51.55	99.01	8.51	19	52.69	82.33	8.52
	20	52.44	94.67	8.49	20	52.98	97.09	8.48	20	51.83	84.03	8.48
	21	54.65	97.03	8.45	21	54.08	103.08	8.43	21	53.23	84.34	8.50
	22	54.68	91.73	8.51	22	52.46	102.87	8.45	22	54.15	84.33	8.50
	23	53.78	89.35	8.53	23	52.76	102.81	8.46	23	54.34	80.77	8.47
	24	53.87	98.11	8.41	24	53.71	101.85	8.44	24	53.22	82.17	8.50
	25	54.04	102.60	8.45	25	52.35	99.71	8.50	25	54.62	82.96	8.48
	26	52.03	98.33	8.44	26	53.08	96.61	8.51	26	53.82	81.08	8.52
	27	52.99	100.66	8.43	27	54.01	101.73	8.51	27	54.39	78.15	8.47
	28	53.92	97.01	8.45	28	54.72	93.10	8.56	28	54.05	81.25	8.50
	29	52.99	102.14	8.45	29	52.87	91.59	8.52	29	54.48	83.12	8.44
2	30	53.03	104.87	8.39	2 30	52.68	101.86	8.54	2 30	55.54	82.18	8.44
	31	52.35	103.34	8.41	31	51.10	99.63	8.48	31	54.53	84.39	8.50
	32	53.97	102.70	8.49	32	52.97	95.18	8.54	32	54.42	82.71	8.42
	33	52.84	99.36	8.44	33	53.32	100.70	8.50	33	54.89	86.21	8.45
	34	54.03	108.89	8.30	34	51.93	100.25	8.46	34	53.59	80.01	8.51
	35	53.07	104.36	8.37	35	53.54	99.57	8.46	35	53.19	78.90	8.41
	36	52.82	101.72	8.41	36	53.16	100.35	8.48	36	53.59	90.26	8.37
	37	52.82	98.28	8.46	37	53.66	95.97	8.51	37	52.40	86.37	8.42
	38	52.55	102.98	8.41	38	53.84	102.39	8.44	38	52.71	85.59	8.40
	39	53.72	97.60	8.46	39	53.04	103.33	8.45	39	53.87	89.10	8.37
	40	52.24	101.24	8.42	40	52.30	100.78	8.43	40	51.61	87.88	8.35
	41	52.23	102.81	8.44	41	53.50	102.77	8.45	41	52.80	92.02	8.36
	42	52.21	100.36	8.44	42	51.93	100.66	8.45	42	53.31	88.21	8.39
	43	53.38	101.61	8.46	43	53.31	97.81	8.48	43	54.26	84.68	8.41
	44	52.73	102.08	8.48	44	52.93	101.93	8.50	44	51.72	82.73	8.42
	45	53.44	102.13	8.42	45	53.22	100.72	8.47	45	53.39	86.64	8.43
	46	52.52	98.58	8.46	46	52.86	97.10	8.47	46	53.41	85.94	8.41
	47	53.93	92.96	8.50	47	52.21	95.55	8.50	47	52.27	91.54	8.38
	48	53.43	94.32	8.48	48	53.56	92.21	8.46	48	54.33	86.15	8.44
	49	53.03	99.81	8.44	49	53.39	102.99	8.47	49	52.64	79.28	8.51
3	50	53.68	101.93	8.45	50	53.07	100.40	8.50	50	52.48	83.49	8.40
	51	54.04	103.14	8.45	51	52.53	96.45	8.51	51	51.29	94.35	8.44
	52	51.28	100.37	8.44	52	53.70	93.61	8.48	52	52.67	85.30	8.40
	53	52.42	102.08	8.47	53	52.20	92.05	8.55	53	53.62	87.06	8.42
	54	53.37	99.57	8.45	54	52.71	93.66	8.47	54	52.72	82.95	8.40
	55	52.48	98.83	8.48	55	53.61	101.57	8.46	55	52.75	82.44	8.49
	56	52.54	83.33	8.59	56	53.37	98.75	8.50	56	55.32	90.75	8.39
	57	53.58	95.04	8.48	57	53.65	94.06	8.52	57	54.24	85.72	8.48
	58	53.70	107.26	8.34	58	53.31	98.90	8.48	58	54.71	87.84	8.44
	59	52.49	102.48	8.48	59	52.05	104.47	8.44	59	53.17	84.92	8.49
	60	53.50	96.95	8.52	60	52.76	102.79	8.46	60	54.08	81.12	8.51
		53.22	99.88	8.44		53.01	99.26	8.47		53.31	85.21	8.45

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/28/2010	08:34:43 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	1.12	0.00	-0.80	0.00	0.00	0.00	0.00
1/28/2010	08:34:58 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.32	0.00	-1.26	0.00	0.00	0.00	0.00
1/28/2010	08:35:13 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	1.34	0.00	-1.12	0.00	0.00	0.00	0.00
1/28/2010	08:35:28 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.59	0.00	-0.97	0.00	0.00	0.00	0.00
1/28/2010	08:35:43 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.02	1.82	0.00	-2.20	0.00	0.00	0.00	0.00
1/28/2010	08:35:58 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	1.25	0.00	-0.26	0.00	0.00	0.00	0.00
1/28/2010	08:36:13 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.37	0.00	-0.95	0.00	0.00	0.00	0.00
1/28/2010	08:36:28 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.31	0.00	-3.68	0.00	0.00	0.00	0.00
1/28/2010	08:36:43 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.62	0.00	-0.77	0.00	0.00	0.00	0.00
1/28/2010	08:36:58 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.30	0.00	-0.49	0.00	0.00	0.00	0.00
1/28/2010	08:37:13 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	1.51	0.00	-0.13	0.00	0.00	0.00	0.00
1/28/2010	08:37:28 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	ZER-001	0.03	0.92	0.00	-2.00	0.00	0.00	0.00	0.00
1/28/2010	08:38:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.91	242.92	0.00	243.45	0.00	0.00	0.00	0.00
1/28/2010	08:38:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.92	242.01	0.00	243.44	0.00	0.00	0.00	0.00
1/28/2010	08:39:09 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.89	243.49	0.00	243.26	0.00	0.00	0.00	0.00
1/28/2010	08:39:24 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.91	242.09	0.00	243.92	0.00	0.00	0.00	0.00
1/28/2010	08:39:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.90	242.50	0.00	243.71	0.00	0.00	0.00	0.00
1/28/2010	08:39:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.91	242.90	0.00	244.42	0.00	0.00	0.00	0.00
1/28/2010	08:40:09 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.91	242.49	0.00	244.54	0.00	0.00	0.00	0.00
1/28/2010	08:40:24 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.88	241.44	0.00	243.45	0.00	0.00	0.00	0.00
1/28/2010	08:40:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALH-001	20.89	242.41	0.00	244.41	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/28/2010	08:42:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.30	123.59	0.00	127.11	0.00	0.00	0.00	0.00
1/28/2010	08:42:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	125.02	0.00	125.61	0.00	0.00	0.00	0.00
1/28/2010	08:43:09 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	126.10	0.00	126.78	0.00	0.00	0.00	0.00
1/28/2010	08:43:24 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	125.93	0.00	125.01	0.00	0.00	0.00	0.00
1/28/2010	08:43:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.30	124.58	0.00	127.81	0.00	0.00	0.00	0.00
1/28/2010	08:43:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	125.26	0.00	123.18	0.00	0.00	0.00	0.00
1/28/2010	08:44:09 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.30	125.09	0.00	125.19	0.00	0.00	0.00	0.00
1/28/2010	08:44:24 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	125.13	0.00	121.77	0.00	0.00	0.00	0.00
1/28/2010	08:44:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.30	125.23	0.00	124.42	0.00	0.00	0.00	0.00
1/28/2010	08:44:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.31	125.40	0.00	121.87	0.00	0.00	0.00	0.00
1/28/2010	08:45:09 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.30	126.06	0.00	120.76	0.00	0.00	0.00	0.00
1/28/2010	08:45:24 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.32	122.87	0.00	125.20	0.00	0.00	0.00	0.00
1/28/2010	08:45:39 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.33	126.41	0.00	123.78	0.00	0.00	0.00	0.00
1/28/2010	08:45:54 AM	Ponder Compressor Stati	MC1989	Caterpillar G3516LE	CALM-001	12.32	125.03	0.00	123.12	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/28/2010	08:29:19 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	6.37	0.00	-0.82	0.00	0.00	0.00	0.00
1/28/2010	08:29:34 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	30.78	0.00	-0.62	0.00	0.00	0.00	0.00
1/28/2010	08:29:49 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	47.20	0.00	-4.18	0.00	0.00	0.00	0.00
1/28/2010	08:30:04 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	47.38	0.00	-1.11	0.00	0.00	0.00	0.00
1/28/2010	08:30:19 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	46.74	0.00	-0.50	0.00	0.00	0.00	0.00
1/28/2010	08:30:34 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	46.46	0.00	-0.70	0.00	0.00	0.00	0.00
1/28/2010	08:30:49 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	46.42	0.00	-0.79	0.00	0.00	0.00	0.00
1/28/2010	08:31:04 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	47.40	0.00	-0.93	0.00	0.00	0.00	0.00
1/28/2010	08:31:19 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	46.19	0.00	-3.92	0.00	0.00	0.00	0.00
1/28/2010	08:31:34 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.03	47.03	0.00	-1.06	0.00	0.00	0.00	0.00
1/28/2010	08:31:49 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.04	47.03	0.00	-0.37	0.00	0.00	0.00	0.00
1/28/2010	08:32:04 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	noxcnv	0.02	45.06	0.00	-4.26	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	08:47:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	2.80	0.00	-0.34	0.00	0.00	0.00	0.00
1/28/2010	08:47:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	0.38	0.00	-0.89	0.00	0.00	0.00	0.00
1/28/2010	08:47:50 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	1.07	0.00	-0.68	0.00	0.00	0.00	0.00
1/28/2010	08:48:05 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	4.82	0.00	-2.86	0.00	0.00	0.00	0.00
1/28/2010	08:48:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	56.41	0.00	-1.46	0.00	0.00	0.00	0.00
1/28/2010	08:48:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	114.56	0.00	-2.35	0.00	0.00	0.00	0.00
1/28/2010	08:48:50 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	123.09	0.00	-2.56	0.00	0.00	0.00	0.00
1/28/2010	08:49:05 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	122.84	0.00	-0.77	0.00	0.00	0.00	0.00
1/28/2010	08:49:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	124.18	0.00	-1.58	0.00	0.00	0.00	0.00
1/28/2010	08:49:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	124.01	0.00	-0.62	0.00	0.00	0.00	0.00
1/28/2010	08:49:50 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	9.15	109.01	0.00	-1.33	0.00	0.00	0.00	0.00
1/28/2010	08:50:05 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.27	43.62	0.00	-0.56	0.00	0.00	0.00	0.00
1/28/2010	08:50:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.28	3.00	0.00	-0.53	0.00	0.00	0.00	0.00
1/28/2010	08:50:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.32	0.73	0.00	-0.69	0.00	0.00	0.00	0.00
1/28/2010	08:50:50 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.35	1.09	0.00	-0.23	0.00	0.00	0.00	0.00
1/28/2010	08:51:05 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.40	0.62	0.00	-0.55	0.00	0.00	0.00	0.00
1/28/2010	08:51:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	12.40	1.24	0.00	-0.38	0.00	0.00	0.00	0.00
1/28/2010	08:51:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	11.01	0.47	0.00	12.61	0.00	0.00	0.00	0.00
1/28/2010	08:51:50 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.33	0.38	0.00	116.85	0.00	0.00	0.00	0.00
1/28/2010	08:52:05 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.04	0.95	0.00	119.73	0.00	0.00	0.00	0.00
1/28/2010	08:52:20 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	0.60	0.00	121.68	0.00	0.00	0.00	0.00
1/28/2010	08:52:35 AM	Under	Compressor Station	MC1989	Caterpillar G3516LE	BIAS-001	0.03	1.37	0.00	120.52	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	08:55:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	99.40	0.00	54.74	0.00	0.00	0.00	0.00
1/28/2010	08:55:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	94.65	0.00	54.22	0.00	0.00	0.00	0.00
1/28/2010	08:55:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	91.83	0.00	52.12	0.00	0.00	0.00	0.00
1/28/2010	08:56:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	99.38	0.00	55.22	0.00	0.00	0.00	0.00
1/28/2010	08:56:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	99.18	0.00	53.12	0.00	0.00	0.00	0.00
1/28/2010	08:56:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	104.75	0.00	52.45	0.00	0.00	0.00	0.00
1/28/2010	08:56:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	98.18	0.00	53.04	0.00	0.00	0.00	0.00
1/28/2010	08:57:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.56	87.02	0.00	52.25	0.00	0.00	0.00	0.00
1/28/2010	08:57:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	94.47	0.00	52.39	0.00	0.00	0.00	0.00
1/28/2010	08:57:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	102.51	0.00	53.92	0.00	0.00	0.00	0.00
1/28/2010	08:57:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	103.05	0.00	54.87	0.00	0.00	0.00	0.00
1/28/2010	08:58:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	100.27	0.00	56.24	0.00	0.00	0.00	0.00
1/28/2010	08:58:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.27	102.11	0.00	55.46	0.00	0.00	0.00	0.00
1/28/2010	08:58:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	103.34	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	08:58:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	103.30	0.00	53.67	0.00	0.00	0.00	0.00
1/28/2010	08:59:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.59	98.67	0.00	50.75	0.00	0.00	0.00	0.00
1/28/2010	08:59:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	101.13	0.00	51.74	0.00	0.00	0.00	0.00
1/28/2010	08:59:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.32	103.69	0.00	50.45	0.00	0.00	0.00	0.00
1/28/2010	08:59:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	104.03	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	09:00:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	101.58	0.00	53.10	0.00	0.00	0.00	0.00
1/28/2010	09:00:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.33	104.17	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	09:00:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.35	107.81	0.00	54.66	0.00	0.00	0.00	0.00
1/28/2010	09:00:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	101.48	0.00	53.66	0.00	0.00	0.00	0.00
1/28/2010	09:01:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	96.50	0.00	54.27	0.00	0.00	0.00	0.00
1/28/2010	09:01:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	93.13	0.00	57.26	0.00	0.00	0.00	0.00
1/28/2010	09:01:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	95.78	0.00	53.13	0.00	0.00	0.00	0.00
1/28/2010	09:01:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	100.83	0.00	52.15	0.00	0.00	0.00	0.00
1/28/2010	09:02:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	98.37	0.00	54.67	0.00	0.00	0.00	0.00
1/28/2010	09:02:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	94.81	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	09:02:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	103.24	0.00	51.82	0.00	0.00	0.00	0.00
1/28/2010	09:02:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	110.10	0.00	51.73	0.00	0.00	0.00	0.00
1/28/2010	09:03:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	102.41	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	09:03:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	88.32	0.00	53.56	0.00	0.00	0.00	0.00
1/28/2010	09:03:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	94.51	0.00	53.88	0.00	0.00	0.00	0.00
1/28/2010	09:03:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	99.67	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	09:04:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	100.31	0.00	51.04	0.00	0.00	0.00	0.00
1/28/2010	09:04:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	99.43	0.00	51.27	0.00	0.00	0.00	0.00
1/28/2010	09:04:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	96.16	0.00	53.75	0.00	0.00	0.00	0.00
1/28/2010	09:04:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	99.54	0.00	54.87	0.00	0.00	0.00	0.00
1/28/2010	09:05:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	100.31	0.00	55.32	0.00	0.00	0.00	0.00
1/28/2010	09:05:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	102.24	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	09:05:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	104.83	0.00	52.29	0.00	0.00	0.00	0.00
1/28/2010	09:05:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.33	104.22	0.00	52.70	0.00	0.00	0.00	0.00
1/28/2010	09:06:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	102.92	0.00	57.20	0.00	0.00	0.00	0.00
1/28/2010	09:06:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.32	102.06	0.00	50.71	0.00	0.00	0.00	0.00
1/28/2010	09:06:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	102.47	0.00	58.24	0.00	0.00	0.00	0.00
1/28/2010	09:06:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	103.38	0.00	51.92	0.00	0.00	0.00	0.00
1/28/2010	09:07:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	102.13	0.00	52.36	0.00	0.00	0.00	0.00
1/28/2010	09:07:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	102.88	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	09:07:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	103.80	0.00	55.40	0.00	0.00	0.00	0.00
1/28/2010	09:07:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	104.99	0.00	51.69	0.00	0.00	0.00	0.00
1/28/2010	09:08:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.34	106.97	0.00	53.59	0.00	0.00	0.00	0.00
1/28/2010	09:08:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	108.15	0.00	53.49	0.00	0.00	0.00	0.00

1/28/2010	09:08:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	105.79	0.00	54.41	0.00	0.00	0.00	0.00
1/28/2010	09:08:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	103.14	0.00	53.15	0.00	0.00	0.00	0.00
1/28/2010	09:09:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	101.78	0.00	54.48	0.00	0.00	0.00	0.00
1/28/2010	09:09:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	100.63	0.00	54.82	0.00	0.00	0.00	0.00
1/28/2010	09:09:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	97.83	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	09:09:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	96.92	0.00	51.31	0.00	0.00	0.00	0.00
1/28/2010	09:10:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	94.86	0.00	55.48	0.00	0.00	0.00	0.00
1/28/2010	09:10:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	88.33	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	09:10:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	95.22	0.00	55.32	0.00	0.00	0.00	0.00
1/28/2010	09:10:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	101.16	0.00	49.80	0.00	0.00	0.00	0.00
1/28/2010	09:11:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	100.35	0.00	52.39	0.00	0.00	0.00	0.00
1/28/2010	09:11:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	96.83	0.00	53.36	0.00	0.00	0.00	0.00
1/28/2010	09:11:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	100.15	0.00	51.73	0.00	0.00	0.00	0.00
1/28/2010	09:11:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	102.99	0.00	54.46	0.00	0.00	0.00	0.00
1/28/2010	09:12:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	103.31	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	09:12:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	101.30	0.00	52.09	0.00	0.00	0.00	0.00
1/28/2010	09:12:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	99.51	0.00	53.49	0.00	0.00	0.00	0.00
1/28/2010	09:12:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	100.15	0.00	53.36	0.00	0.00	0.00	0.00
1/28/2010	09:13:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	99.85	0.00	56.60	0.00	0.00	0.00	0.00
1/28/2010	09:13:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	97.97	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	09:13:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	102.12	0.00	53.79	0.00	0.00	0.00	0.00
1/28/2010	09:13:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	102.29	0.00	55.13	0.00	0.00	0.00	0.00
1/28/2010	09:14:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	100.89	0.00	54.25	0.00	0.00	0.00	0.00
1/28/2010	09:14:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	102.96	0.00	54.59	0.00	0.00	0.00	0.00
1/28/2010	09:14:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	104.64	0.00	53.99	0.00	0.00	0.00	0.00
1/28/2010	09:14:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	102.97	0.00	51.08	0.00	0.00	0.00	0.00
1/28/2010	09:15:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	92.45	0.00	50.45	0.00	0.00	0.00	0.00
1/28/2010	09:15:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	92.36	0.00	53.27	0.00	0.00	0.00	0.00
1/28/2010	09:15:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	98.49	0.00	54.40	0.00	0.00	0.00	0.00
1/28/2010	09:15:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	95.02	0.00	51.11	0.00	0.00	0.00	0.00
1/28/2010	09:16:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	92.82	0.00	50.98	0.00	0.00	0.00	0.00
1/28/2010	09:16:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	94.99	0.00	53.17	0.00	0.00	0.00	0.00
1/28/2010	09:16:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	99.44	0.00	55.55	0.00	0.00	0.00	0.00
1/28/2010	09:16:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	97.71	0.00	55.22	0.00	0.00	0.00	0.00
1/28/2010	09:17:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	95.98	0.00	54.67	0.00	0.00	0.00	0.00
1/28/2010	09:17:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	95.14	0.00	53.24	0.00	0.00	0.00	0.00
1/28/2010	09:17:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	91.85	0.00	54.46	0.00	0.00	0.00	0.00
1/28/2010	09:17:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	91.58	0.00	53.82	0.00	0.00	0.00	0.00
1/28/2010	09:18:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.58	88.36	0.00	57.19	0.00	0.00	0.00	0.00
1/28/2010	09:18:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.59	86.32	0.00	54.35	0.00	0.00	0.00	0.00
1/28/2010	09:18:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	89.66	0.00	53.49	0.00	0.00	0.00	0.00
1/28/2010	09:18:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	89.81	0.00	53.59	0.00	0.00	0.00	0.00
1/28/2010	09:19:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.56	91.59	0.00	53.67	0.00	0.00	0.00	0.00
1/28/2010	09:19:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	99.61	0.00	55.07	0.00	0.00	0.00	0.00
1/28/2010	09:19:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	98.26	0.00	54.90	0.00	0.00	0.00	0.00
1/28/2010	09:19:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	95.82	0.00	51.92	0.00	0.00	0.00	0.00
1/28/2010	09:20:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	98.76	0.00	53.59	0.00	0.00	0.00	0.00
1/28/2010	09:20:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	105.50	0.00	53.67	0.00	0.00	0.00	0.00
1/28/2010	09:20:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	106.04	0.00	53.79	0.00	0.00	0.00	0.00
1/28/2010	09:20:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	101.18	0.00	53.17	0.00	0.00	0.00	0.00
1/28/2010	09:21:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.56	97.66	0.00	55.53	0.00	0.00	0.00	0.00
1/28/2010	09:21:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	94.47	0.00	51.63	0.00	0.00	0.00	0.00
1/28/2010	09:21:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	94.93	0.00	51.96	0.00	0.00	0.00	0.00
1/28/2010	09:21:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	103.79	0.00	51.95	0.00	0.00	0.00	0.00
1/28/2010	09:22:14 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	100.12	0.00	52.57	0.00	0.00	0.00	0.00
1/28/2010	09:22:29 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	101.79	0.00	52.02	0.00	0.00	0.00	0.00
1/28/2010	09:22:44 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	103.43	0.00	54.72	0.00	0.00	0.00	0.00
1/28/2010	09:22:59 AM	Ponder	Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	100.89	0.00	51.17	0.00	0.00	0.00	0.00

1/28/2010	09:23:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	96.53	0.00	54.06	0.00	0.00	0.00	0.00
1/28/2010	09:23:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	95.37	0.00	53.67	0.00	0.00	0.00	0.00
1/28/2010	09:23:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	96.57	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	09:23:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	93.87	0.00	54.64	0.00	0.00	0.00	0.00
1/28/2010	09:24:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.31	102.22	0.00	52.58	0.00	0.00	0.00	0.00
1/28/2010	09:24:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	107.58	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	09:24:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	106.25	0.00	51.71	0.00	0.00	0.00	0.00
1/28/2010	09:24:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	95.86	0.00	51.73	0.00	0.00	0.00	0.00
1/28/2010	09:25:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	98.86	0.00	53.99	0.00	0.00	0.00	0.00
1/28/2010	09:25:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	102.98	0.00	50.69	0.00	0.00	0.00	0.00
1/28/2010	09:25:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.31	108.88	0.00	54.61	0.00	0.00	0.00	0.00
1/28/2010	09:25:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	107.70	0.00	51.66	0.00	0.00	0.00	0.00
1/28/2010	09:26:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	99.91	0.00	55.16	0.00	0.00	0.00	0.00
1/28/2010	09:26:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	98.74	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	09:26:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	104.44	0.00	51.65	0.00	0.00	0.00	0.00
1/28/2010	09:26:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.35	105.54	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	09:27:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	104.63	0.00	53.13	0.00	0.00	0.00	0.00
1/28/2010	09:27:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	104.53	0.00	55.74	0.00	0.00	0.00	0.00
1/28/2010	09:27:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	100.51	0.00	53.62	0.00	0.00	0.00	0.00
1/28/2010	09:27:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	101.66	0.00	52.78	0.00	0.00	0.00	0.00
1/28/2010	09:28:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	104.10	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	09:28:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	101.65	0.00	53.09	0.00	0.00	0.00	0.00
1/28/2010	09:28:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	102.42	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	09:28:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	96.05	0.00	52.47	0.00	0.00	0.00	0.00
1/28/2010	09:29:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	97.33	0.00	52.58	0.00	0.00	0.00	0.00
1/28/2010	09:29:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.25	105.73	0.00	52.78	0.00	0.00	0.00	0.00
1/28/2010	09:29:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.26	111.11	0.00	56.08	0.00	0.00	0.00	0.00
1/28/2010	09:29:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.34	109.33	0.00	53.54	0.00	0.00	0.00	0.00
1/28/2010	09:30:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.34	109.37	0.00	53.72	0.00	0.00	0.00	0.00
1/28/2010	09:30:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.34	106.45	0.00	55.63	0.00	0.00	0.00	0.00
1/28/2010	09:30:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	106.48	0.00	52.18	0.00	0.00	0.00	0.00
1/28/2010	09:30:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.30	102.18	0.00	53.46	0.00	0.00	0.00	0.00
1/28/2010	09:31:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	102.34	0.00	51.01	0.00	0.00	0.00	0.00
1/28/2010	09:31:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	102.89	0.00	52.34	0.00	0.00	0.00	0.00
1/28/2010	09:31:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.35	102.67	0.00	51.50	0.00	0.00	0.00	0.00
1/28/2010	09:31:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	102.11	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	09:32:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	99.19	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	09:32:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	101.81	0.00	51.37	0.00	0.00	0.00	0.00
1/28/2010	09:32:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	97.22	0.00	54.22	0.00	0.00	0.00	0.00
1/28/2010	09:32:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	96.07	0.00	51.99	0.00	0.00	0.00	0.00
1/28/2010	09:33:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	98.02	0.00	53.69	0.00	0.00	0.00	0.00
1/28/2010	09:33:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	100.05	0.00	52.57	0.00	0.00	0.00	0.00
1/28/2010	09:33:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	105.46	0.00	52.65	0.00	0.00	0.00	0.00
1/28/2010	09:33:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.35	103.98	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	09:34:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	102.41	0.00	51.89	0.00	0.00	0.00	0.00
1/28/2010	09:34:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	93.95	0.00	53.66	0.00	0.00	0.00	0.00
1/28/2010	09:34:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	97.09	0.00	55.06	0.00	0.00	0.00	0.00
1/28/2010	09:34:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	101.05	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	09:35:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	98.32	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	09:35:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	96.64	0.00	51.17	0.00	0.00	0.00	0.00
1/28/2010	09:35:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	100.74	0.00	51.87	0.00	0.00	0.00	0.00
1/28/2010	09:35:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	103.49	0.00	54.14	0.00	0.00	0.00	0.00
1/28/2010	09:36:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.39	104.10	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	09:36:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.35	102.90	0.00	50.72	0.00	0.00	0.00	0.00
1/28/2010	09:36:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	105.20	0.00	54.27	0.00	0.00	0.00	0.00
1/28/2010	09:36:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	103.58	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	09:37:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	99.55	0.00	50.92	0.00	0.00	0.00	0.00
1/28/2010	09:37:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	97.35	0.00	52.96	0.00	0.00	0.00	0.00

1/28/2010	09:37:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	98.53	0.00	50.40	0.00	0.00	0.00	0.00
1/28/2010	09:37:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	101.91	0.00	53.33	0.00	0.00	0.00	0.00
1/28/2010	09:38:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	103.65	0.00	52.13	0.00	0.00	0.00	0.00
1/28/2010	09:38:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	99.32	0.00	50.90	0.00	0.00	0.00	0.00
1/28/2010	09:38:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	102.41	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	09:38:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	102.25	0.00	55.42	0.00	0.00	0.00	0.00
1/28/2010	09:39:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	102.44	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	09:39:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	103.65	0.00	53.36	0.00	0.00	0.00	0.00
1/28/2010	09:39:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	103.52	0.00	51.71	0.00	0.00	0.00	0.00
1/28/2010	09:39:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	100.35	0.00	52.49	0.00	0.00	0.00	0.00
1/28/2010	09:40:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	100.81	0.00	53.34	0.00	0.00	0.00	0.00
1/28/2010	09:40:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.37	103.91	0.00	53.88	0.00	0.00	0.00	0.00
1/28/2010	09:40:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	102.41	0.00	53.49	0.00	0.00	0.00	0.00
1/28/2010	09:40:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	101.93	0.00	52.10	0.00	0.00	0.00	0.00
1/28/2010	09:41:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	100.25	0.00	54.30	0.00	0.00	0.00	0.00
1/28/2010	09:41:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	100.84	0.00	52.19	0.00	0.00	0.00	0.00
1/28/2010	09:41:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	98.99	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	09:41:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	96.17	0.00	50.45	0.00	0.00	0.00	0.00
1/28/2010	09:42:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	98.31	0.00	54.56	0.00	0.00	0.00	0.00
1/28/2010	09:42:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.60	94.87	0.00	54.74	0.00	0.00	0.00	0.00
1/28/2010	09:42:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	90.45	0.00	56.31	0.00	0.00	0.00	0.00
1/28/2010	09:42:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	92.03	0.00	53.41	0.00	0.00	0.00	0.00
1/28/2010	09:43:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	94.47	0.00	51.27	0.00	0.00	0.00	0.00
1/28/2010	09:43:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	98.28	0.00	52.65	0.00	0.00	0.00	0.00
1/28/2010	09:43:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	92.64	0.00	52.50	0.00	0.00	0.00	0.00
1/28/2010	09:43:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	91.99	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	09:44:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	94.37	0.00	53.78	0.00	0.00	0.00	0.00
1/28/2010	09:44:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	99.23	0.00	50.25	0.00	0.00	0.00	0.00
1/28/2010	09:44:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	102.28	0.00	54.12	0.00	0.00	0.00	0.00
1/28/2010	09:44:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	99.45	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	09:45:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	98.26	0.00	54.87	0.00	0.00	0.00	0.00
1/28/2010	09:45:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	100.85	0.00	56.79	0.00	0.00	0.00	0.00
1/28/2010	09:45:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	102.17	0.00	54.17	0.00	0.00	0.00	0.00
1/28/2010	09:45:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	103.38	0.00	51.74	0.00	0.00	0.00	0.00
1/28/2010	09:46:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.50	101.33	0.00	52.00	0.00	0.00	0.00	0.00
1/28/2010	09:46:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.41	102.98	0.00	53.92	0.00	0.00	0.00	0.00
1/28/2010	09:46:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	102.80	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	09:46:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	102.81	0.00	52.18	0.00	0.00	0.00	0.00
1/28/2010	09:47:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	103.98	0.00	55.53	0.00	0.00	0.00	0.00
1/28/2010	09:47:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	98.50	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	09:47:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	97.78	0.00	54.48	0.00	0.00	0.00	0.00
1/28/2010	09:47:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	100.42	0.00	49.80	0.00	0.00	0.00	0.00
1/28/2010	09:48:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.31	104.77	0.00	48.14	0.00	0.00	0.00	0.00
1/28/2010	09:48:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.40	107.34	0.00	53.95	0.00	0.00	0.00	0.00
1/28/2010	09:48:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	103.29	0.00	50.68	0.00	0.00	0.00	0.00
1/28/2010	09:48:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	99.44	0.00	50.49	0.00	0.00	0.00	0.00
1/28/2010	09:49:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	98.24	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	09:49:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.42	100.02	0.00	52.97	0.00	0.00	0.00	0.00
1/28/2010	09:49:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	100.52	0.00	54.20	0.00	0.00	0.00	0.00
1/28/2010	09:49:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.38	101.57	0.00	50.88	0.00	0.00	0.00	0.00
1/28/2010	09:50:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.60	96.16	0.00	55.42	0.00	0.00	0.00	0.00
1/28/2010	09:50:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	93.30	0.00	51.08	0.00	0.00	0.00	0.00
1/28/2010	09:50:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	100.95	0.00	51.85	0.00	0.00	0.00	0.00
1/28/2010	09:50:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	100.91	0.00	52.21	0.00	0.00	0.00	0.00
1/28/2010	09:51:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.63	100.16	0.00	54.77	0.00	0.00	0.00	0.00
1/28/2010	09:51:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.59	86.70	0.00	51.06	0.00	0.00	0.00	0.00
1/28/2010	09:51:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.68	80.55	0.00	52.21	0.00	0.00	0.00	0.00
1/28/2010	09:51:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.55	78.60	0.00	51.83	0.00	0.00	0.00	0.00

1/28/2010	09:52:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	87.48	0.00	55.04	0.00	0.00	0.00	0.00
1/28/2010	09:52:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.55	98.84	0.00	53.20	0.00	0.00	0.00	0.00
1/28/2010	09:52:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	91.15	0.00	55.21	0.00	0.00	0.00	0.00
1/28/2010	09:52:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	92.89	0.00	53.82	0.00	0.00	0.00	0.00
1/28/2010	09:53:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	97.28	0.00	52.10	0.00	0.00	0.00	0.00
1/28/2010	09:53:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.30	102.39	0.00	52.42	0.00	0.00	0.00	0.00
1/28/2010	09:53:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.44	106.19	0.00	54.77	0.00	0.00	0.00	0.00
1/28/2010	09:53:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.36	110.14	0.00	52.33	0.00	0.00	0.00	0.00
1/28/2010	09:54:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.27	110.33	0.00	55.26	0.00	0.00	0.00	0.00
1/28/2010	09:54:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.51	107.92	0.00	53.66	0.00	0.00	0.00	0.00
1/28/2010	09:54:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.49	103.76	0.00	52.57	0.00	0.00	0.00	0.00
1/28/2010	09:54:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.47	98.79	0.00	50.87	0.00	0.00	0.00	0.00
1/28/2010	09:55:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.46	99.46	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	09:55:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.48	102.05	0.00	54.75	0.00	0.00	0.00	0.00
1/28/2010	09:55:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.61	96.69	0.00	54.05	0.00	0.00	0.00	0.00
1/28/2010	09:55:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.45	94.48	0.00	54.46	0.00	0.00	0.00	0.00
1/28/2010	09:56:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	94.58	0.00	50.75	0.00	0.00	0.00	0.00
1/28/2010	09:56:29 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.53	94.60	0.00	56.28	0.00	0.00	0.00	0.00
1/28/2010	09:56:44 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.54	90.57	0.00	53.47	0.00	0.00	0.00	0.00
1/28/2010	09:56:59 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.52	93.17	0.00	53.01	0.00	0.00	0.00	0.00
1/28/2010	09:57:14 AM	Ponder Compressor Statio	MC1989	Caterpillar G3516LE	TST-001	8.43	99.27	0.00	57.68	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	09:59:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	1.50	0.00	-2.39	0.00	0.00	0.00	0.00
1/28/2010	09:59:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	1.37	0.00	-2.75	0.00	0.00	0.00	0.00
1/28/2010	09:59:35 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	1.42	0.00	-2.28	0.00	0.00	0.00	0.00
1/28/2010	09:59:50 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	24.01	0.00	-1.32	0.00	0.00	0.00	0.00
1/28/2010	10:00:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	88.54	0.00	-1.56	0.00	0.00	0.00	0.00
1/28/2010	10:00:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	121.67	0.00	-0.38	0.00	0.00	0.00	0.00
1/28/2010	10:00:35 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	122.53	0.00	-2.82	0.00	0.00	0.00	0.00
1/28/2010	10:00:50 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	123.45	0.00	-3.28	0.00	0.00	0.00	0.00
1/28/2010	10:01:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	123.04	0.00	-1.47	0.00	0.00	0.00	0.00
1/28/2010	10:01:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	123.08	0.00	-2.21	0.00	0.00	0.00	0.00
1/28/2010	10:01:35 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	4.75	118.65	0.00	-0.75	0.00	0.00	0.00	0.00
1/28/2010	10:01:50 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	12.33	70.06	0.00	-1.22	0.00	0.00	0.00	0.00
1/28/2010	10:02:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	12.36	11.69	0.00	-1.39	0.00	0.00	0.00	0.00
1/28/2010	10:02:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	12.39	1.83	0.00	-1.38	0.00	0.00	0.00	0.00
1/28/2010	10:02:35 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	12.39	1.69	0.00	-1.54	0.00	0.00	0.00	0.00
1/28/2010	10:02:50 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	4.48	1.24	0.00	73.46	0.00	0.00	0.00	0.00
1/28/2010	10:03:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.04	0.71	0.00	121.31	0.00	0.00	0.00	0.00
1/28/2010	10:03:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.04	0.94	0.00	118.90	0.00	0.00	0.00	0.00
1/28/2010	10:03:35 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	0.94	0.00	121.67	0.00	0.00	0.00	0.00
1/28/2010	10:03:50 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	0.68	0.00	119.05	0.00	0.00	0.00	0.00
1/28/2010	10:04:05 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	1.65	0.00	119.18	0.00	0.00	0.00	0.00
1/28/2010	10:04:20 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-002	0.03	1.48	0.00	8.52	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^X	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	10:05:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	97.88	0.00	53.83	0.00	0.00	0.00	0.00
1/28/2010	10:06:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	90.83	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	10:06:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	92.05	0.00	55.45	0.00	0.00	0.00	0.00
1/28/2010	10:06:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	92.93	0.00	51.97	0.00	0.00	0.00	0.00
1/28/2010	10:06:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.34	96.19	0.00	56.08	0.00	0.00	0.00	0.00
1/28/2010	10:07:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	102.95	0.00	52.97	0.00	0.00	0.00	0.00
1/28/2010	10:07:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	106.20	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	10:07:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	106.44	0.00	54.27	0.00	0.00	0.00	0.00
1/28/2010	10:07:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.33	103.03	0.00	52.84	0.00	0.00	0.00	0.00
1/28/2010	10:08:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	102.87	0.00	53.75	0.00	0.00	0.00	0.00
1/28/2010	10:08:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	98.23	0.00	53.75	0.00	0.00	0.00	0.00
1/28/2010	10:08:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.34	100.54	0.00	52.57	0.00	0.00	0.00	0.00
1/28/2010	10:08:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.33	105.88	0.00	52.22	0.00	0.00	0.00	0.00
1/28/2010	10:09:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	109.71	0.00	52.21	0.00	0.00	0.00	0.00
1/28/2010	10:09:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	102.66	0.00	53.20	0.00	0.00	0.00	0.00
1/28/2010	10:09:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	104.57	0.00	51.90	0.00	0.00	0.00	0.00
1/28/2010	10:09:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	108.48	0.00	51.27	0.00	0.00	0.00	0.00
1/28/2010	10:10:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	104.42	0.00	52.00	0.00	0.00	0.00	0.00
1/28/2010	10:10:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	102.12	0.00	53.54	0.00	0.00	0.00	0.00
1/28/2010	10:10:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	100.56	0.00	53.39	0.00	0.00	0.00	0.00
1/28/2010	10:10:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.67	87.28	0.00	54.87	0.00	0.00	0.00	0.00
1/28/2010	10:11:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.57	84.05	0.00	53.04	0.00	0.00	0.00	0.00
1/28/2010	10:11:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	85.21	0.00	54.02	0.00	0.00	0.00	0.00
1/28/2010	10:11:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.35	90.52	0.00	53.85	0.00	0.00	0.00	0.00
1/28/2010	10:11:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	98.16	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	10:12:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	97.19	0.00	52.31	0.00	0.00	0.00	0.00
1/28/2010	10:12:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	95.00	0.00	50.95	0.00	0.00	0.00	0.00
1/28/2010	10:12:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	93.79	0.00	53.91	0.00	0.00	0.00	0.00
1/28/2010	10:12:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	100.40	0.00	50.87	0.00	0.00	0.00	0.00
1/28/2010	10:13:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.57	99.94	0.00	50.52	0.00	0.00	0.00	0.00
1/28/2010	10:13:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	90.22	0.00	54.09	0.00	0.00	0.00	0.00
1/28/2010	10:13:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	94.81	0.00	54.88	0.00	0.00	0.00	0.00
1/28/2010	10:13:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	101.67	0.00	54.41	0.00	0.00	0.00	0.00
1/28/2010	10:14:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	102.13	0.00	55.89	0.00	0.00	0.00	0.00
1/28/2010	10:14:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	102.19	0.00	55.53	0.00	0.00	0.00	0.00
1/28/2010	10:14:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	100.72	0.00	54.15	0.00	0.00	0.00	0.00
1/28/2010	10:14:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.36	99.07	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	10:15:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.34	107.60	0.00	54.35	0.00	0.00	0.00	0.00
1/28/2010	10:15:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.36	107.93	0.00	52.78	0.00	0.00	0.00	0.00
1/28/2010	10:15:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	105.54	0.00	51.37	0.00	0.00	0.00	0.00
1/28/2010	10:15:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	102.06	0.00	52.64	0.00	0.00	0.00	0.00
1/28/2010	10:16:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.34	100.25	0.00	50.87	0.00	0.00	0.00	0.00
1/28/2010	10:16:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	105.44	0.00	51.47	0.00	0.00	0.00	0.00
1/28/2010	10:16:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	104.27	0.00	49.22	0.00	0.00	0.00	0.00
1/28/2010	10:16:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	98.25	0.00	55.07	0.00	0.00	0.00	0.00
1/28/2010	10:17:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.58	93.14	0.00	53.41	0.00	0.00	0.00	0.00
1/28/2010	10:17:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	92.65	0.00	53.46	0.00	0.00	0.00	0.00
1/28/2010	10:17:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	97.85	0.00	51.58	0.00	0.00	0.00	0.00
1/28/2010	10:17:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	101.29	0.00	53.72	0.00	0.00	0.00	0.00
1/28/2010	10:18:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	101.56	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	10:18:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	105.81	0.00	51.04	0.00	0.00	0.00	0.00
1/28/2010	10:18:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.37	107.97	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	10:18:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.33	106.84	0.00	52.20	0.00	0.00	0.00	0.00

1/28/2010	10:19:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.49	106.82	0.00	51.66	0.00	0.00	0.00	0.00
1/28/2010	10:19:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.40	103.39	0.00	53.85	0.00	0.00	0.00	0.00
1/28/2010	10:19:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.46	102.69	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	10:19:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	100.63	0.00	54.72	0.00	0.00	0.00	0.00
1/28/2010	10:20:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.53	94.74	0.00	50.50	0.00	0.00	0.00	0.00
1/28/2010	10:20:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.58	94.49	0.00	50.75	0.00	0.00	0.00	0.00
1/28/2010	10:20:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.51	99.73	0.00	51.39	0.00	0.00	0.00	0.00
1/28/2010	10:20:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.59	93.24	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	10:21:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.56	89.18	0.00	53.02	0.00	0.00	0.00	0.00
1/28/2010	10:21:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.49	100.73	0.00	51.37	0.00	0.00	0.00	0.00
1/28/2010	10:21:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.41	103.75	0.00	53.26	0.00	0.00	0.00	0.00
1/28/2010	10:21:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	102.80	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	10:22:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	94.72	0.00	54.95	0.00	0.00	0.00	0.00
1/28/2010	10:22:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.55	90.19	0.00	56.70	0.00	0.00	0.00	0.00
1/28/2010	10:22:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.35	96.88	0.00	50.92	0.00	0.00	0.00	0.00
1/28/2010	10:22:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	98.61	0.00	51.34	0.00	0.00	0.00	0.00
1/28/2010	10:23:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.51	95.95	0.00	50.82	0.00	0.00	0.00	0.00
1/28/2010	10:23:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.38	98.54	0.00	55.20	0.00	0.00	0.00	0.00
1/28/2010	10:23:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	103.25	0.00	56.29	0.00	0.00	0.00	0.00
1/28/2010	10:23:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.45	102.47	0.00	53.14	0.00	0.00	0.00	0.00
1/28/2010	10:24:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	96.75	0.00	55.17	0.00	0.00	0.00	0.00
1/28/2010	10:24:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.30	101.97	0.00	54.19	0.00	0.00	0.00	0.00
1/28/2010	10:24:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.48	103.27	0.00	53.17	0.00	0.00	0.00	0.00
1/28/2010	10:24:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	100.26	0.00	51.71	0.00	0.00	0.00	0.00
1/28/2010	10:25:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	96.58	0.00	50.03	0.00	0.00	0.00	0.00
1/28/2010	10:25:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.42	100.15	0.00	53.88	0.00	0.00	0.00	0.00
1/28/2010	10:25:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.58	99.05	0.00	50.58	0.00	0.00	0.00	0.00
1/28/2010	10:25:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.44	101.37	0.00	53.04	0.00	0.00	0.00	0.00
1/28/2010	10:26:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.58	98.65	0.00	52.42	0.00	0.00	0.00	0.00
1/28/2010	10:26:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.48	91.21	0.00	54.42	0.00	0.00	0.00	0.00
1/28/2010	10:26:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.43	97.13	0.00	52.02	0.00	0.00	0.00	0.00
1/28/2010	10:26:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.46	100.10	0.00	55.11	0.00	0.00	0.00	0.00
1/28/2010	10:27:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	103.31	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	10:27:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.36	103.54	0.00	53.43	0.00	0.00	0.00	0.00
1/28/2010	10:27:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.41	105.37	0.00	54.51	0.00	0.00	0.00	0.00
1/28/2010	10:27:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.45	107.53	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	10:28:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	103.78	0.00	53.14	0.00	0.00	0.00	0.00
1/28/2010	10:28:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.43	99.04	0.00	52.50	0.00	0.00	0.00	0.00
1/28/2010	10:28:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.40	101.11	0.00	49.67	0.00	0.00	0.00	0.00
1/28/2010	10:28:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	98.24	0.00	54.22	0.00	0.00	0.00	0.00
1/28/2010	10:29:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.38	103.45	0.00	51.68	0.00	0.00	0.00	0.00
1/28/2010	10:29:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.42	105.70	0.00	52.76	0.00	0.00	0.00	0.00
1/28/2010	10:29:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.49	103.86	0.00	52.39	0.00	0.00	0.00	0.00
1/28/2010	10:29:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.50	100.74	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	10:30:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.36	100.13	0.00	54.69	0.00	0.00	0.00	0.00
1/28/2010	10:30:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.46	103.85	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	10:30:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.45	102.69	0.00	53.99	0.00	0.00	0.00	0.00
1/28/2010	10:30:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.51	101.10	0.00	50.62	0.00	0.00	0.00	0.00
1/28/2010	10:31:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	101.40	0.00	52.05	0.00	0.00	0.00	0.00
1/28/2010	10:31:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.44	98.16	0.00	53.02	0.00	0.00	0.00	0.00
1/28/2010	10:31:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	98.18	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	10:31:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.57	98.29	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	10:32:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	96.41	0.00	53.37	0.00	0.00	0.00	0.00
1/28/2010	10:32:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.55	93.37	0.00	54.85	0.00	0.00	0.00	0.00
1/28/2010	10:32:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.38	98.37	0.00	50.87	0.00	0.00	0.00	0.00
1/28/2010	10:32:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.46	102.94	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	10:33:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.58	102.68	0.00	54.25	0.00	0.00	0.00	0.00
1/28/2010	10:33:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	100.21	0.00	52.47	0.00	0.00	0.00	0.00

1/28/2010	10:33:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	101.10	0.00	54.51	0.00	0.00	0.00	0.00
1/28/2010	10:33:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	99.29	0.00	55.09	0.00	0.00	0.00	0.00
1/28/2010	10:34:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.60	95.56	0.00	54.74	0.00	0.00	0.00	0.00
1/28/2010	10:34:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.58	88.42	0.00	55.01	0.00	0.00	0.00	0.00
1/28/2010	10:34:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	89.12	0.00	54.02	0.00	0.00	0.00	0.00
1/28/2010	10:34:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	88.06	0.00	53.67	0.00	0.00	0.00	0.00
1/28/2010	10:35:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	94.07	0.00	54.88	0.00	0.00	0.00	0.00
1/28/2010	10:35:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	90.82	0.00	50.58	0.00	0.00	0.00	0.00
1/28/2010	10:35:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	93.40	0.00	52.36	0.00	0.00	0.00	0.00
1/28/2010	10:35:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	102.48	0.00	51.32	0.00	0.00	0.00	0.00
1/28/2010	10:36:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	102.80	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	10:36:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	102.29	0.00	51.29	0.00	0.00	0.00	0.00
1/28/2010	10:36:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.59	99.87	0.00	55.10	0.00	0.00	0.00	0.00
1/28/2010	10:36:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	95.89	0.00	48.07	0.00	0.00	0.00	0.00
1/28/2010	10:37:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	99.40	0.00	53.57	0.00	0.00	0.00	0.00
1/28/2010	10:37:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	101.38	0.00	52.25	0.00	0.00	0.00	0.00
1/28/2010	10:37:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	101.83	0.00	50.51	0.00	0.00	0.00	0.00
1/28/2010	10:37:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	98.48	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	10:38:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	91.55	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	10:38:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	92.06	0.00	54.77	0.00	0.00	0.00	0.00
1/28/2010	10:38:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	98.64	0.00	50.53	0.00	0.00	0.00	0.00
1/28/2010	10:38:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	99.09	0.00	53.88	0.00	0.00	0.00	0.00
1/28/2010	10:39:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	100.69	0.00	53.14	0.00	0.00	0.00	0.00
1/28/2010	10:39:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	102.25	0.00	51.50	0.00	0.00	0.00	0.00
1/28/2010	10:39:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	100.75	0.00	54.77	0.00	0.00	0.00	0.00
1/28/2010	10:39:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	100.88	0.00	52.50	0.00	0.00	0.00	0.00
1/28/2010	10:40:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	102.36	0.00	50.26	0.00	0.00	0.00	0.00
1/28/2010	10:40:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	99.54	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	10:40:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	98.21	0.00	51.87	0.00	0.00	0.00	0.00
1/28/2010	10:40:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	99.73	0.00	55.37	0.00	0.00	0.00	0.00
1/28/2010	10:41:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	97.48	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	10:41:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	99.33	0.00	53.66	0.00	0.00	0.00	0.00
1/28/2010	10:41:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	101.73	0.00	52.44	0.00	0.00	0.00	0.00
1/28/2010	10:41:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	102.63	0.00	54.04	0.00	0.00	0.00	0.00
1/28/2010	10:42:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	102.28	0.00	51.53	0.00	0.00	0.00	0.00
1/28/2010	10:42:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	96.41	0.00	55.13	0.00	0.00	0.00	0.00
1/28/2010	10:42:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	100.09	0.00	51.95	0.00	0.00	0.00	0.00
1/28/2010	10:42:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.58	99.68	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	10:43:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	93.56	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	10:43:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	90.03	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	10:43:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	100.60	0.00	55.16	0.00	0.00	0.00	0.00
1/28/2010	10:43:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	106.69	0.00	53.15	0.00	0.00	0.00	0.00
1/28/2010	10:44:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	103.19	0.00	53.44	0.00	0.00	0.00	0.00
1/28/2010	10:44:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	100.02	0.00	55.40	0.00	0.00	0.00	0.00
1/28/2010	10:44:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	99.67	0.00	53.38	0.00	0.00	0.00	0.00
1/28/2010	10:44:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.35	102.82	0.00	53.72	0.00	0.00	0.00	0.00
1/28/2010	10:45:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	108.11	0.00	52.34	0.00	0.00	0.00	0.00
1/28/2010	10:45:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	103.77	0.00	53.33	0.00	0.00	0.00	0.00
1/28/2010	10:45:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	98.60	0.00	52.75	0.00	0.00	0.00	0.00
1/28/2010	10:45:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	99.85	0.00	51.94	0.00	0.00	0.00	0.00
1/28/2010	10:46:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	100.01	0.00	51.31	0.00	0.00	0.00	0.00
1/28/2010	10:46:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	101.18	0.00	51.97	0.00	0.00	0.00	0.00
1/28/2010	10:46:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	102.08	0.00	53.99	0.00	0.00	0.00	0.00
1/28/2010	10:46:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	103.87	0.00	49.48	0.00	0.00	0.00	0.00
1/28/2010	10:47:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	102.51	0.00	54.04	0.00	0.00	0.00	0.00
1/28/2010	10:47:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	101.98	0.00	55.74	0.00	0.00	0.00	0.00
1/28/2010	10:47:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	102.73	0.00	54.75	0.00	0.00	0.00	0.00
1/28/2010	10:47:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	99.68	0.00	48.85	0.00	0.00	0.00	0.00

1/28/2010	10:48:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	100.83	0.00	53.09	0.00	0.00	0.00	0.00
1/28/2010	10:48:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	100.85	0.00	51.90	0.00	0.00	0.00	0.00
1/28/2010	10:48:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	101.29	0.00	53.86	0.00	0.00	0.00	0.00
1/28/2010	10:48:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	99.59	0.00	54.01	0.00	0.00	0.00	0.00
1/28/2010	10:49:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	97.94	0.00	52.13	0.00	0.00	0.00	0.00
1/28/2010	10:49:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	96.03	0.00	52.52	0.00	0.00	0.00	0.00
1/28/2010	10:49:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.47	97.66	0.00	54.59	0.00	0.00	0.00	0.00
1/28/2010	10:49:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	103.45	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	10:50:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.62	103.50	0.00	54.95	0.00	0.00	0.00	0.00
1/28/2010	10:50:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	99.11	0.00	52.10	0.00	0.00	0.00	0.00
1/28/2010	10:50:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.58	101.66	0.00	50.98	0.00	0.00	0.00	0.00
1/28/2010	10:50:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	104.91	0.00	53.75	0.00	0.00	0.00	0.00
1/28/2010	10:51:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	105.01	0.00	53.02	0.00	0.00	0.00	0.00
1/28/2010	10:51:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	96.76	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	10:51:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	96.18	0.00	53.15	0.00	0.00	0.00	0.00
1/28/2010	10:51:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	98.77	0.00	50.91	0.00	0.00	0.00	0.00
1/28/2010	10:52:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	99.32	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	10:52:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	98.08	0.00	54.22	0.00	0.00	0.00	0.00
1/28/2010	10:52:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.45	92.21	0.00	53.02	0.00	0.00	0.00	0.00
1/28/2010	10:52:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	99.39	0.00	51.67	0.00	0.00	0.00	0.00
1/28/2010	10:53:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	99.62	0.00	53.31	0.00	0.00	0.00	0.00
1/28/2010	10:53:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	93.83	0.00	53.57	0.00	0.00	0.00	0.00
1/28/2010	10:53:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	89.37	0.00	50.27	0.00	0.00	0.00	0.00
1/28/2010	10:53:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.54	89.11	0.00	55.14	0.00	0.00	0.00	0.00
1/28/2010	10:54:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.38	88.69	0.00	53.79	0.00	0.00	0.00	0.00
1/28/2010	10:54:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	94.63	0.00	50.93	0.00	0.00	0.00	0.00
1/28/2010	10:54:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	96.39	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	10:54:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	101.24	0.00	54.72	0.00	0.00	0.00	0.00
1/28/2010	10:55:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	103.46	0.00	51.84	0.00	0.00	0.00	0.00
1/28/2010	10:55:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.41	101.89	0.00	55.23	0.00	0.00	0.00	0.00
1/28/2010	10:55:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.49	105.35	0.00	51.76	0.00	0.00	0.00	0.00
1/28/2010	10:55:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.40	105.05	0.00	54.54	0.00	0.00	0.00	0.00
1/28/2010	10:56:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.56	100.32	0.00	51.92	0.00	0.00	0.00	0.00
1/28/2010	10:56:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.59	99.25	0.00	50.19	0.00	0.00	0.00	0.00
1/28/2010	10:56:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	96.99	0.00	55.64	0.00	0.00	0.00	0.00
1/28/2010	10:56:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.52	96.90	0.00	54.61	0.00	0.00	0.00	0.00
1/28/2010	10:57:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	96.67	0.00	51.42	0.00	0.00	0.00	0.00
1/28/2010	10:57:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.57	93.82	0.00	51.34	0.00	0.00	0.00	0.00
1/28/2010	10:57:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.43	98.40	0.00	52.76	0.00	0.00	0.00	0.00
1/28/2010	10:57:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	96.31	0.00	54.09	0.00	0.00	0.00	0.00
1/28/2010	10:58:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.36	88.86	0.00	55.25	0.00	0.00	0.00	0.00
1/28/2010	10:58:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	90.13	0.00	54.69	0.00	0.00	0.00	0.00
1/28/2010	10:58:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	99.14	0.00	50.77	0.00	0.00	0.00	0.00
1/28/2010	10:58:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.61	99.29	0.00	51.57	0.00	0.00	0.00	0.00
1/28/2010	10:59:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.59	93.38	0.00	52.36	0.00	0.00	0.00	0.00
1/28/2010	10:59:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.50	86.79	0.00	52.50	0.00	0.00	0.00	0.00
1/28/2010	10:59:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.51	88.73	0.00	52.35	0.00	0.00	0.00	0.00
1/28/2010	10:59:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.45	90.82	0.00	53.20	0.00	0.00	0.00	0.00
1/28/2010	11:00:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	92.70	0.00	49.90	0.00	0.00	0.00	0.00
1/28/2010	11:00:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.57	95.13	0.00	52.58	0.00	0.00	0.00	0.00
1/28/2010	11:00:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.48	95.97	0.00	55.16	0.00	0.00	0.00	0.00
1/28/2010	11:00:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.39	102.74	0.00	53.80	0.00	0.00	0.00	0.00
1/28/2010	11:01:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.46	103.99	0.00	53.99	0.00	0.00	0.00	0.00
1/28/2010	11:01:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.55	99.84	0.00	54.74	0.00	0.00	0.00	0.00
1/28/2010	11:01:36 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.42	99.69	0.00	51.89	0.00	0.00	0.00	0.00
1/28/2010	11:01:51 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.53	91.77	0.00	51.45	0.00	0.00	0.00	0.00
1/28/2010	11:02:06 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.44	100.16	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	11:02:21 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-002	8.45	102.65	0.00	53.01	0.00	0.00	0.00	0.00

1/28/2010	11:02:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.57	100.41	0.00	54.20	0.00	0.00	0.00	0.00
1/28/2010	11:02:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.59	93.04	0.00	52.32	0.00	0.00	0.00	0.00
1/28/2010	11:03:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.54	89.78	0.00	54.58	0.00	0.00	0.00	0.00
1/28/2010	11:03:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.45	94.96	0.00	52.19	0.00	0.00	0.00	0.00
1/28/2010	11:03:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.48	98.44	0.00	55.50	0.00	0.00	0.00	0.00
1/28/2010	11:03:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.49	98.91	0.00	51.43	0.00	0.00	0.00	0.00
1/28/2010	11:04:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	96.26	0.00	53.82	0.00	0.00	0.00	0.00
1/28/2010	11:04:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.52	99.02	0.00	55.22	0.00	0.00	0.00	0.00
1/28/2010	11:04:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.42	101.40	0.00	52.76	0.00	0.00	0.00	0.00
1/28/2010	11:04:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.42	105.18	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	11:05:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.46	104.21	0.00	50.92	0.00	0.00	0.00	0.00
1/28/2010	11:05:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.42	105.29	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	11:05:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.44	103.18	0.00	51.67	0.00	0.00	0.00	0.00
1/28/2010	11:05:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.41	103.16	0.00	51.18	0.00	0.00	0.00	0.00
1/28/2010	11:06:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.36	103.64	0.00	52.13	0.00	0.00	0.00	0.00
1/28/2010	11:06:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	104.18	0.00	53.86	0.00	0.00	0.00	0.00
1/28/2010	11:06:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.58	100.16	0.00	53.85	0.00	0.00	0.00	0.00
1/28/2010	11:06:51 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.39	99.65	0.00	54.49	0.00	0.00	0.00	0.00
1/28/2010	11:07:06 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.45	100.64	0.00	51.58	0.00	0.00	0.00	0.00
1/28/2010	11:07:21 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.47	101.74	0.00	50.65	0.00	0.00	0.00	0.00
1/28/2010	11:07:36 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-002	8.44	100.41	0.00	53.07	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	11:08:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.04	1.59	0.00	-2.47	0.00	0.00	0.00	0.00
1/28/2010	11:09:07 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	1.52	0.00	-3.23	0.00	0.00	0.00	0.00
1/28/2010	11:09:22 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	3.94	0.00	-1.69	0.00	0.00	0.00	0.00
1/28/2010	11:09:37 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	52.28	0.00	-1.41	0.00	0.00	0.00	0.00
1/28/2010	11:09:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	112.14	0.00	-0.99	0.00	0.00	0.00	0.00
1/28/2010	11:10:07 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	122.62	0.00	-2.21	0.00	0.00	0.00	0.00
1/28/2010	11:10:22 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	122.39	0.00	-1.80	0.00	0.00	0.00	0.00
1/28/2010	11:10:37 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	122.92	0.00	-0.96	0.00	0.00	0.00	0.00
1/28/2010	11:10:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	122.17	0.00	-2.23	0.00	0.00	0.00	0.00
1/28/2010	11:11:07 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.07	124.09	0.00	-2.11	0.00	0.00	0.00	0.00
1/28/2010	11:11:22 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	10.96	99.39	0.00	-0.91	0.00	0.00	0.00	0.00
1/28/2010	11:11:37 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	12.36	36.11	0.00	-0.65	0.00	0.00	0.00	0.00
1/28/2010	11:11:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	12.39	2.56	0.00	-1.54	0.00	0.00	0.00	0.00
1/28/2010	11:12:07 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	12.43	1.50	0.00	-1.07	0.00	0.00	0.00	0.00
1/28/2010	11:12:22 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	12.29	1.28	0.00	-0.23	0.00	0.00	0.00	0.00
1/28/2010	11:12:37 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	1.28	1.27	0.00	105.32	0.00	0.00	0.00	0.00
1/28/2010	11:12:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.04	1.19	0.00	118.37	0.00	0.00	0.00	0.00
1/28/2010	11:13:07 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.04	0.92	0.00	119.94	0.00	0.00	0.00	0.00
1/28/2010	11:13:22 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	1.10	0.00	118.26	0.00	0.00	0.00	0.00
1/28/2010	11:13:37 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	1.22	0.00	120.59	0.00	0.00	0.00	0.00
1/28/2010	11:13:52 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-003	0.03	1.19	0.00	62.99	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	$O^{2\,B}$	HC RT	THC cut	CH4 cut
1/28/2010	11:14:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	105.62	0.00	53.30	0.00	0.00	0.00	0.00
1/28/2010	11:15:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	106.29	0.00	52.03	0.00	0.00	0.00	0.00
1/28/2010	11:15:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	102.88	0.00	51.63	0.00	0.00	0.00	0.00
1/28/2010	11:15:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	96.08	0.00	53.57	0.00	0.00	0.00	0.00
1/28/2010	11:15:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	90.63	0.00	55.22	0.00	0.00	0.00	0.00
1/28/2010	11:16:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	91.61	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	11:16:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	93.44	0.00	52.31	0.00	0.00	0.00	0.00
1/28/2010	11:16:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.56	85.80	0.00	54.04	0.00	0.00	0.00	0.00
1/28/2010	11:16:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	82.16	0.00	49.60	0.00	0.00	0.00	0.00
1/28/2010	11:17:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	79.43	0.00	52.36	0.00	0.00	0.00	0.00
1/28/2010	11:17:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	78.79	0.00	50.22	0.00	0.00	0.00	0.00
1/28/2010	11:17:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	82.40	0.00	56.42	0.00	0.00	0.00	0.00
1/28/2010	11:17:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.60	79.40	0.00	51.31	0.00	0.00	0.00	0.00
1/28/2010	11:18:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	76.67	0.00	53.89	0.00	0.00	0.00	0.00
1/28/2010	11:18:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.55	81.89	0.00	52.94	0.00	0.00	0.00	0.00
1/28/2010	11:18:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.34	83.05	0.00	53.72	0.00	0.00	0.00	0.00
1/28/2010	11:18:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	89.07	0.00	52.37	0.00	0.00	0.00	0.00
1/28/2010	11:19:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.57	83.66	0.00	51.61	0.00	0.00	0.00	0.00
1/28/2010	11:19:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	76.32	0.00	51.44	0.00	0.00	0.00	0.00
1/28/2010	11:19:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	78.53	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	11:19:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	89.17	0.00	54.41	0.00	0.00	0.00	0.00
1/28/2010	11:20:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	94.29	0.00	53.44	0.00	0.00	0.00	0.00
1/28/2010	11:20:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	93.13	0.00	50.10	0.00	0.00	0.00	0.00
1/28/2010	11:20:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.58	85.41	0.00	55.40	0.00	0.00	0.00	0.00
1/28/2010	11:20:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	81.82	0.00	50.67	0.00	0.00	0.00	0.00
1/28/2010	11:21:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.37	86.11	0.00	52.32	0.00	0.00	0.00	0.00
1/28/2010	11:21:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	91.03	0.00	52.78	0.00	0.00	0.00	0.00
1/28/2010	11:21:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	90.12	0.00	53.59	0.00	0.00	0.00	0.00
1/28/2010	11:21:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	86.68	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	11:22:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.52	81.75	0.00	52.16	0.00	0.00	0.00	0.00
1/28/2010	11:22:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	80.50	0.00	50.76	0.00	0.00	0.00	0.00
1/28/2010	11:22:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.57	82.44	0.00	53.54	0.00	0.00	0.00	0.00
1/28/2010	11:22:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	80.60	0.00	55.01	0.00	0.00	0.00	0.00
1/28/2010	11:23:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	80.16	0.00	50.10	0.00	0.00	0.00	0.00
1/28/2010	11:23:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	83.12	0.00	50.64	0.00	0.00	0.00	0.00
1/28/2010	11:23:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	85.63	0.00	52.45	0.00	0.00	0.00	0.00
1/28/2010	11:23:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	89.53	0.00	55.42	0.00	0.00	0.00	0.00
1/28/2010	11:24:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	88.66	0.00	55.16	0.00	0.00	0.00	0.00
1/28/2010	11:24:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	89.29	0.00	52.73	0.00	0.00	0.00	0.00
1/28/2010	11:24:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	87.83	0.00	52.00	0.00	0.00	0.00	0.00
1/28/2010	11:24:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	85.42	0.00	52.19	0.00	0.00	0.00	0.00
1/28/2010	11:25:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.33	87.15	0.00	54.41	0.00	0.00	0.00	0.00
1/28/2010	11:25:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.55	89.62	0.00	52.24	0.00	0.00	0.00	0.00
1/28/2010	11:25:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	87.54	0.00	53.12	0.00	0.00	0.00	0.00
1/28/2010	11:25:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	90.39	0.00	52.74	0.00	0.00	0.00	0.00
1/28/2010	11:26:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	86.01	0.00	55.97	0.00	0.00	0.00	0.00
1/28/2010	11:26:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	88.74	0.00	53.64	0.00	0.00	0.00	0.00
1/28/2010	11:26:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	87.28	0.00	54.35	0.00	0.00	0.00	0.00
1/28/2010	11:26:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.36	89.79	0.00	53.68	0.00	0.00	0.00	0.00
1/28/2010	11:27:12 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.41	98.85	0.00	54.95	0.00	0.00	0.00	0.00
1/28/2010	11:27:27 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	95.94	0.00	50.55	0.00	0.00	0.00	0.00
1/28/2010	11:27:42 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	89.72	0.00	54.12	0.00	0.00	0.00	0.00
1/28/2010	11:27:57 AM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.37	85.36	0.00	51.08	0.00	0.00	0.00	0.00

1/28/2010	11:28:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.33	89.30	0.00	56.19	0.00	0.00	0.00	0.00
1/28/2010	11:28:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.52	87.96	0.00	55.14	0.00	0.00	0.00	0.00
1/28/2010	11:28:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.61	79.62	0.00	52.91	0.00	0.00	0.00	0.00
1/28/2010	11:28:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.56	80.44	0.00	50.66	0.00	0.00	0.00	0.00
1/28/2010	11:29:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.38	79.49	0.00	51.63	0.00	0.00	0.00	0.00
1/28/2010	11:29:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	83.94	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	11:29:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.45	90.80	0.00	56.29	0.00	0.00	0.00	0.00
1/28/2010	11:29:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.50	89.66	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	11:30:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.44	83.28	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	11:30:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.41	85.57	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	11:30:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.41	89.78	0.00	52.32	0.00	0.00	0.00	0.00
1/28/2010	11:30:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.51	87.40	0.00	55.00	0.00	0.00	0.00	0.00
1/28/2010	11:31:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.56	85.34	0.00	50.27	0.00	0.00	0.00	0.00
1/28/2010	11:31:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.44	85.33	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	11:31:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.58	85.43	0.00	53.52	0.00	0.00	0.00	0.00
1/28/2010	11:31:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.43	81.13	0.00	50.32	0.00	0.00	0.00	0.00
1/28/2010	11:32:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.40	82.10	0.00	50.11	0.00	0.00	0.00	0.00
1/28/2010	11:32:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.36	91.38	0.00	54.35	0.00	0.00	0.00	0.00
1/28/2010	11:32:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	93.07	0.00	52.89	0.00	0.00	0.00	0.00
1/28/2010	11:32:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.40	87.94	0.00	52.02	0.00	0.00	0.00	0.00
1/28/2010	11:33:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.51	87.79	0.00	51.58	0.00	0.00	0.00	0.00
1/28/2010	11:33:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.40	89.62	0.00	52.18	0.00	0.00	0.00	0.00
1/28/2010	11:33:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	87.59	0.00	53.36	0.00	0.00	0.00	0.00
1/28/2010	11:33:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.57	86.21	0.00	50.72	0.00	0.00	0.00	0.00
1/28/2010	11:34:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.53	84.69	0.00	53.66	0.00	0.00	0.00	0.00
1/28/2010	11:34:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.61	79.37	0.00	55.34	0.00	0.00	0.00	0.00
1/28/2010	11:34:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.37	79.04	0.00	51.03	0.00	0.00	0.00	0.00
1/28/2010	11:34:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	83.39	0.00	52.10	0.00	0.00	0.00	0.00
1/28/2010	11:35:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	83.97	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	11:35:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.45	82.60	0.00	52.09	0.00	0.00	0.00	0.00
1/28/2010	11:35:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	86.16	0.00	50.45	0.00	0.00	0.00	0.00
1/28/2010	11:35:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.50	84.24	0.00	52.70	0.00	0.00	0.00	0.00
1/28/2010	11:36:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.56	84.13	0.00	53.72	0.00	0.00	0.00	0.00
1/28/2010	11:36:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.42	84.19	0.00	53.73	0.00	0.00	0.00	0.00
1/28/2010	11:36:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.50	84.79	0.00	52.75	0.00	0.00	0.00	0.00
1/28/2010	11:36:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.45	85.29	0.00	55.03	0.00	0.00	0.00	0.00
1/28/2010	11:37:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.52	87.34	0.00	53.04	0.00	0.00	0.00	0.00
1/28/2010	11:37:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	83.46	0.00	54.69	0.00	0.00	0.00	0.00
1/28/2010	11:37:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.55	81.23	0.00	53.83	0.00	0.00	0.00	0.00
1/28/2010	11:37:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.43	74.45	0.00	53.65	0.00	0.00	0.00	0.00
1/28/2010	11:38:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	79.36	0.00	53.64	0.00	0.00	0.00	0.00
1/28/2010	11:38:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	84.90	0.00	54.02	0.00	0.00	0.00	0.00
1/28/2010	11:38:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	84.38	0.00	56.05	0.00	0.00	0.00	0.00
1/28/2010	11:38:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	81.08	0.00	54.42	0.00	0.00	0.00	0.00
1/28/2010	11:39:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	84.43	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	11:39:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.55	82.46	0.00	51.39	0.00	0.00	0.00	0.00
1/28/2010	11:39:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.50	80.70	0.00	54.51	0.00	0.00	0.00	0.00
1/28/2010	11:39:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.50	83.10	0.00	55.03	0.00	0.00	0.00	0.00
1/28/2010	11:40:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.47	86.36	0.00	55.51	0.00	0.00	0.00	0.00
1/28/2010	11:40:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.55	82.57	0.00	53.56	0.00	0.00	0.00	0.00
1/28/2010	11:40:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.40	79.80	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	11:40:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.49	84.26	0.00	55.95	0.00	0.00	0.00	0.00
1/28/2010	11:41:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.51	81.59	0.00	52.29	0.00	0.00	0.00	0.00
1/28/2010	11:41:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.53	79.63	0.00	55.45	0.00	0.00	0.00	0.00
1/28/2010	11:41:42 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.54	78.85	0.00	51.60	0.00	0.00	0.00	0.00
1/28/2010	11:41:57 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.52	76.32	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	11:42:12 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.48	73.94	0.00	53.17	0.00	0.00	0.00	0.00
1/28/2010	11:42:27 AM	Ponder Compressor Stat MC1989	Caterpillar G3516LE	TST-003	8.34	80.73	0.00	57.13	0.00	0.00	0.00	0.00

1/28/2010	11:42:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	81.60	0.00	53.57	0.00	0.00	0.00	0.00
1/28/2010	11:42:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	81.58	0.00	52.92	0.00	0.00	0.00	0.00
1/28/2010	11:43:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	82.36	0.00	54.43	0.00	0.00	0.00	0.00
1/28/2010	11:43:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	83.74	0.00	52.22	0.00	0.00	0.00	0.00
1/28/2010	11:43:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	77.32	0.00	56.63	0.00	0.00	0.00	0.00
1/28/2010	11:43:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	82.57	0.00	55.87	0.00	0.00	0.00	0.00
1/28/2010	11:44:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.32	86.75	0.00	53.39	0.00	0.00	0.00	0.00
1/28/2010	11:44:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	83.39	0.00	55.03	0.00	0.00	0.00	0.00
1/28/2010	11:44:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	79.76	0.00	53.62	0.00	0.00	0.00	0.00
1/28/2010	11:44:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	79.50	0.00	55.59	0.00	0.00	0.00	0.00
1/28/2010	11:45:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	75.66	0.00	54.15	0.00	0.00	0.00	0.00
1/28/2010	11:45:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.29	85.32	0.00	57.81	0.00	0.00	0.00	0.00
1/28/2010	11:45:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.52	88.23	0.00	54.59	0.00	0.00	0.00	0.00
1/28/2010	11:45:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	89.07	0.00	55.43	0.00	0.00	0.00	0.00
1/28/2010	11:46:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	88.68	0.00	55.34	0.00	0.00	0.00	0.00
1/28/2010	11:46:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.63	81.60	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	11:46:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	78.22	0.00	54.80	0.00	0.00	0.00	0.00
1/28/2010	11:46:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	77.20	0.00	53.86	0.00	0.00	0.00	0.00
1/28/2010	11:47:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	80.17	0.00	57.36	0.00	0.00	0.00	0.00
1/28/2010	11:47:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.32	82.44	0.00	55.22	0.00	0.00	0.00	0.00
1/28/2010	11:47:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.37	91.04	0.00	51.24	0.00	0.00	0.00	0.00
1/28/2010	11:47:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.32	90.31	0.00	55.16	0.00	0.00	0.00	0.00
1/28/2010	11:48:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	84.85	0.00	55.82	0.00	0.00	0.00	0.00
1/28/2010	11:48:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	84.54	0.00	53.26	0.00	0.00	0.00	0.00
1/28/2010	11:48:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	85.14	0.00	55.32	0.00	0.00	0.00	0.00
1/28/2010	11:48:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	83.89	0.00	54.06	0.00	0.00	0.00	0.00
1/28/2010	11:49:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	82.24	0.00	52.75	0.00	0.00	0.00	0.00
1/28/2010	11:49:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	79.91	0.00	54.22	0.00	0.00	0.00	0.00
1/28/2010	11:49:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.62	74.01	0.00	53.33	0.00	0.00	0.00	0.00
1/28/2010	11:49:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	74.90	0.00	53.96	0.00	0.00	0.00	0.00
1/28/2010	11:50:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.51	73.91	0.00	54.43	0.00	0.00	0.00	0.00
1/28/2010	11:50:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.34	81.35	0.00	52.09	0.00	0.00	0.00	0.00
1/28/2010	11:50:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	85.44	0.00	52.26	0.00	0.00	0.00	0.00
1/28/2010	11:50:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.27	89.45	0.00	54.38	0.00	0.00	0.00	0.00
1/28/2010	11:51:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	91.67	0.00	54.43	0.00	0.00	0.00	0.00
1/28/2010	11:51:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.41	91.06	0.00	53.83	0.00	0.00	0.00	0.00
1/28/2010	11:51:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.31	88.84	0.00	51.73	0.00	0.00	0.00	0.00
1/28/2010	11:51:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	90.29	0.00	52.65	0.00	0.00	0.00	0.00
1/28/2010	11:52:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	88.12	0.00	51.63	0.00	0.00	0.00	0.00
1/28/2010	11:52:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	82.45	0.00	52.97	0.00	0.00	0.00	0.00
1/28/2010	11:52:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.36	84.60	0.00	52.36	0.00	0.00	0.00	0.00
1/28/2010	11:52:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	85.60	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	11:53:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	84.02	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	11:53:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.37	83.74	0.00	52.99	0.00	0.00	0.00	0.00
1/28/2010	11:53:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	89.01	0.00	52.35	0.00	0.00	0.00	0.00
1/28/2010	11:53:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	90.44	0.00	53.02	0.00	0.00	0.00	0.00
1/28/2010	11:54:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.34	88.76	0.00	53.78	0.00	0.00	0.00	0.00
1/28/2010	11:54:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.30	87.50	0.00	54.23	0.00	0.00	0.00	0.00
1/28/2010	11:54:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	89.68	0.00	54.43	0.00	0.00	0.00	0.00
1/28/2010	11:54:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	87.33	0.00	50.59	0.00	0.00	0.00	0.00
1/28/2010	11:55:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	85.26	0.00	51.97	0.00	0.00	0.00	0.00
1/28/2010	11:55:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.41	88.64	0.00	50.82	0.00	0.00	0.00	0.00
1/28/2010	11:55:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.27	90.27	0.00	53.07	0.00	0.00	0.00	0.00
1/28/2010	11:55:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	90.98	0.00	51.69	0.00	0.00	0.00	0.00
1/28/2010	11:56:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.28	92.19	0.00	51.79	0.00	0.00	0.00	0.00
1/28/2010	11:56:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.32	95.18	0.00	53.93	0.00	0.00	0.00	0.00
1/28/2010	11:56:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	89.72	0.00	53.80	0.00	0.00	0.00	0.00
1/28/2010	11:56:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	85.60	0.00	53.67	0.00	0.00	0.00	0.00

1/28/2010	11:57:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	82.96	0.00	53.70	0.00	0.00	0.00	0.00
1/28/2010	11:57:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.30	88.62	0.00	52.97	0.00	0.00	0.00	0.00
1/28/2010	11:57:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.37	95.65	0.00	52.88	0.00	0.00	0.00	0.00
1/28/2010	11:57:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	82.86	0.00	55.53	0.00	0.00	0.00	0.00
1/28/2010	11:58:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	79.10	0.00	52.81	0.00	0.00	0.00	0.00
1/28/2010	11:58:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.29	85.75	0.00	55.82	0.00	0.00	0.00	0.00
1/28/2010	11:58:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.41	91.02	0.00	52.89	0.00	0.00	0.00	0.00
1/28/2010	11:58:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	85.44	0.00	51.87	0.00	0.00	0.00	0.00
1/28/2010	11:59:12 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	79.12	0.00	49.22	0.00	0.00	0.00	0.00
1/28/2010	11:59:27 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	79.84	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	11:59:42 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	86.53	0.00	53.23	0.00	0.00	0.00	0.00
1/28/2010	11:59:57 AM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	83.96	0.00	54.30	0.00	0.00	0.00	0.00
1/28/2010	12:00:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	84.35	0.00	53.80	0.00	0.00	0.00	0.00
1/28/2010	12:00:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	89.04	0.00	53.93	0.00	0.00	0.00	0.00
1/28/2010	12:00:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	89.22	0.00	51.53	0.00	0.00	0.00	0.00
1/28/2010	12:00:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	81.38	0.00	55.90	0.00	0.00	0.00	0.00
1/28/2010	12:01:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	83.80	0.00	54.98	0.00	0.00	0.00	0.00
1/28/2010	12:01:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	88.97	0.00	50.24	0.00	0.00	0.00	0.00
1/28/2010	12:01:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.33	89.59	0.00	52.52	0.00	0.00	0.00	0.00
1/28/2010	12:01:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.36	89.49	0.00	53.78	0.00	0.00	0.00	0.00
1/28/2010	12:02:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	91.00	0.00	49.20	0.00	0.00	0.00	0.00
1/28/2010	12:02:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.31	90.13	0.00	51.03	0.00	0.00	0.00	0.00
1/28/2010	12:02:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	95.55	0.00	55.06	0.00	0.00	0.00	0.00
1/28/2010	12:02:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	94.57	0.00	52.48	0.00	0.00	0.00	0.00
1/28/2010	12:03:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	87.47	0.00	57.61	0.00	0.00	0.00	0.00
1/28/2010	12:03:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.52	80.16	0.00	52.15	0.00	0.00	0.00	0.00
1/28/2010	12:03:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	82.41	0.00	55.08	0.00	0.00	0.00	0.00
1/28/2010	12:03:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.52	84.75	0.00	49.75	0.00	0.00	0.00	0.00
1/28/2010	12:04:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	80.48	0.00	52.73	0.00	0.00	0.00	0.00
1/28/2010	12:04:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	76.54	0.00	52.45	0.00	0.00	0.00	0.00
1/28/2010	12:04:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	75.35	0.00	55.63	0.00	0.00	0.00	0.00
1/28/2010	12:04:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	77.68	0.00	51.91	0.00	0.00	0.00	0.00
1/28/2010	12:05:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	80.30	0.00	53.12	0.00	0.00	0.00	0.00
1/28/2010	12:05:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	84.65	0.00	52.22	0.00	0.00	0.00	0.00
1/28/2010	12:05:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.28	91.32	0.00	52.68	0.00	0.00	0.00	0.00
1/28/2010	12:05:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	96.30	0.00	53.20	0.00	0.00	0.00	0.00
1/28/2010	12:06:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	95.40	0.00	48.62	0.00	0.00	0.00	0.00
1/28/2010	12:06:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	96.69	0.00	51.87	0.00	0.00	0.00	0.00
1/28/2010	12:06:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.56	88.99	0.00	51.45	0.00	0.00	0.00	0.00
1/28/2010	12:06:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	83.85	0.00	53.44	0.00	0.00	0.00	0.00
1/28/2010	12:07:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	84.08	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	12:07:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.40	85.50	0.00	53.25	0.00	0.00	0.00	0.00
1/28/2010	12:07:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	87.75	0.00	51.14	0.00	0.00	0.00	0.00
1/28/2010	12:07:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	84.89	0.00	53.46	0.00	0.00	0.00	0.00
1/28/2010	12:08:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	86.03	0.00	52.86	0.00	0.00	0.00	0.00
1/28/2010	12:08:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	89.06	0.00	54.90	0.00	0.00	0.00	0.00
1/28/2010	12:08:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	88.26	0.00	53.27	0.00	0.00	0.00	0.00
1/28/2010	12:08:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	80.62	0.00	51.03	0.00	0.00	0.00	0.00
1/28/2010	12:09:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.58	75.95	0.00	55.37	0.00	0.00	0.00	0.00
1/28/2010	12:09:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.29	81.96	0.00	53.28	0.00	0.00	0.00	0.00
1/28/2010	12:09:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.30	93.25	0.00	51.21	0.00	0.00	0.00	0.00
1/28/2010	12:09:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	92.35	0.00	52.39	0.00	0.00	0.00	0.00
1/28/2010	12:10:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	80.11	0.00	54.83	0.00	0.00	0.00	0.00
1/28/2010	12:10:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.56	76.75	0.00	52.55	0.00	0.00	0.00	0.00
1/28/2010	12:10:42 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.50	80.56	0.00	51.24	0.00	0.00	0.00	0.00
1/28/2010	12:10:57 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.44	80.35	0.00	54.51	0.00	0.00	0.00	0.00
1/28/2010	12:11:12 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.28	92.03	0.00	57.86	0.00	0.00	0.00	0.00
1/28/2010	12:11:27 PM	Ponder	Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.38	100.99	0.00	52.50	0.00	0.00	0.00	0.00

1/28/2010	12:11:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	89.61	0.00	56.40	0.00	0.00	0.00	0.00
1/28/2010	12:11:57 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	84.63	0.00	53.47	0.00	0.00	0.00	0.00
1/28/2010	12:12:12 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.39	88.61	0.00	53.04	0.00	0.00	0.00	0.00
1/28/2010	12:12:27 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.57	83.83	0.00	53.46	0.00	0.00	0.00	0.00
1/28/2010	12:12:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.46	85.79	0.00	56.99	0.00	0.00	0.00	0.00
1/28/2010	12:12:57 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.43	87.33	0.00	51.84	0.00	0.00	0.00	0.00
1/28/2010	12:13:12 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.41	83.20	0.00	56.54	0.00	0.00	0.00	0.00
1/28/2010	12:13:27 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	90.16	0.00	54.56	0.00	0.00	0.00	0.00
1/28/2010	12:13:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.48	90.66	0.00	55.90	0.00	0.00	0.00	0.00
1/28/2010	12:13:57 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.45	87.59	0.00	52.91	0.00	0.00	0.00	0.00
1/28/2010	12:14:12 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.35	87.59	0.00	55.35	0.00	0.00	0.00	0.00
1/28/2010	12:14:27 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.52	85.70	0.00	51.24	0.00	0.00	0.00	0.00
1/28/2010	12:14:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.65	78.81	0.00	53.17	0.00	0.00	0.00	0.00
1/28/2010	12:14:57 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.53	72.67	0.00	54.51	0.00	0.00	0.00	0.00
1/28/2010	12:15:12 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	86.29	0.00	56.31	0.00	0.00	0.00	0.00
1/28/2010	12:15:27 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.55	86.83	0.00	54.19	0.00	0.00	0.00	0.00
1/28/2010	12:15:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.55	78.67	0.00	51.32	0.00	0.00	0.00	0.00
1/28/2010	12:15:57 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.57	77.89	0.00	50.69	0.00	0.00	0.00	0.00
1/28/2010	12:16:12 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.42	79.60	0.00	51.63	0.00	0.00	0.00	0.00
1/28/2010	12:16:27 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.49	84.06	0.00	51.37	0.00	0.00	0.00	0.00
1/28/2010	12:16:42 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	TST-003	8.47	82.39	0.00	52.16	0.00	0.00	0.00	0.00

Date	Time	Facility	Unit	Source	Run	O^2	NO^x	CO Hi	CO Lo	O^{2B}	HC RT	THC cut	CH4 cut
1/28/2010	12:18:46 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.70	0.00	-1.99	0.00	0.00	0.00	0.00
1/28/2010	12:19:01 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.54	0.00	-0.55	0.00	0.00	0.00	0.00
1/28/2010	12:19:16 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.47	0.00	-1.59	0.00	0.00	0.00	0.00
1/28/2010	12:19:31 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	35.02	0.00	-3.17	0.00	0.00	0.00	0.00
1/28/2010	12:19:46 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	89.91	0.00	-2.90	0.00	0.00	0.00	0.00
1/28/2010	12:20:01 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	119.77	0.00	-2.37	0.00	0.00	0.00	0.00
1/28/2010	12:20:16 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	121.20	0.00	-2.97	0.00	0.00	0.00	0.00
1/28/2010	12:20:31 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	121.63	0.00	-1.94	0.00	0.00	0.00	0.00
1/28/2010	12:20:46 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	2.90	116.78	0.00	-0.98	0.00	0.00	0.00	0.00
1/28/2010	12:21:01 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	12.28	71.11	0.00	-2.41	0.00	0.00	0.00	0.00
1/28/2010	12:21:16 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	12.37	18.97	0.00	-1.58	0.00	0.00	0.00	0.00
1/28/2010	12:21:31 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	12.40	3.29	0.00	-0.80	0.00	0.00	0.00	0.00
1/28/2010	12:21:46 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	12.41	2.48	0.00	-3.06	0.00	0.00	0.00	0.00
1/28/2010	12:22:01 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	12.30	1.65	0.00	-2.28	0.00	0.00	0.00	0.00
1/28/2010	12:22:16 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	1.49	1.23	0.00	102.90	0.00	0.00	0.00	0.00
1/28/2010	12:22:31 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.04	1.41	0.00	119.00	0.00	0.00	0.00	0.00
1/28/2010	12:22:46 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.32	0.00	120.83	0.00	0.00	0.00	0.00
1/28/2010	12:23:01 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	0.81	0.00	119.78	0.00	0.00	0.00	0.00
1/28/2010	12:23:16 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.23	0.00	118.68	0.00	0.00	0.00	0.00
1/28/2010	12:23:31 PM	Ponder Compressor Stat	MC1989	Caterpillar G3516LE	BIAS-004	0.03	1.43	0.00	119.93	0.00	0.00	0.00	0.00

EPA METHOD 7E
Calibration Data For Oxides of Nitrogen

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/28/10

Location: Ponder Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 600 CLD S/N: V09044

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN	X 100

RANGE: 241

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
ZERO	0.00	0.12%	0.300	NA	NA		NA	0.12%
LOW	124.00	52.45%	126.410	NA	NA		NA	1.00%
HIGH	241.00	101.03%	243.490	NA	NA		NA	1.03%
BIAS Zero	0.00	0.16%	0.380	0.28%	0.680		0.12%	0.16%
BIAS Cal	124.00	51.53%	124.180	51.22%	123.450		-0.30%	-0.23%

RUN 2

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	0.28%	0.680	0.38%	0.920		0.10%	0.38%
BIAS Cal	124.0	51.22%	123.450	51.49%	124.090		0.27%	-0.96%

RUN 3

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	0.38%	0.920	0.34%	0.810		-0.05%	0.38%
BIAS Cal	124.0	51.49%	124.090	50.47%	121.630		-1.02%	-0.96%

EPA METHOD 10
Calibration Data For Carbon Monoxide

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/28/10

Location: Ponder Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 602 S/N: V09042-M

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN	X 100

RANGE: 240

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
ZERO	0	-1.53%	-3.680	NA	NA		NA	-1.53%
LOW	124	53.25%	127.810	NA	NA		NA	1.59%
HIGH	240	101.89%	244.540	NA	NA		NA	1.89%
BIAS Zero	0	-1.19%	-2.860	-1.37%	-3.280		-0.18%	-1.19%
BIAS Cal	124	50.70%	121.680	50.70%	121.670		0.00%	-2.55%

RUN 2

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	-1.37%	-3.280	-1.35%	-3.230		0.02%	-1.35%
BIAS Cal	124.0	50.70%	121.670	50.25%	120.590		-0.45%	-2.56%

RUN 3

	CYLINDER VALUE PPMV	INITIAL ANALYZER RESPONSE CHART READING	PPMV	FINAL ANALYZER RESPONSE CHART READING	PPMV		DRIFT %	Cal err % of span
BIAS Zero	0.0	-1.35%	-3.230	-1.32%	-3.170		0.03%	-1.32%
BIAS Cal	124.0	50.25%	120.590	50.35%	120.830		0.10%	-2.91%

EPA METHOD 3A
Calibration Data For Oxygen

Customer: Texas Midstream Gas Services Technician: Jeff Anderson Date: 01/28/10

Location: Ponder Compressor Station Analyzer Make: California Analytical

Source: Caterpillar G3516LE Analyzer Model: 6o2 Oxyg S/N: V04056

% DRIFT =	FINAL RESPONSE - INITIAL RESPONSE / SPAN	X 100
% Analyzer Calibration Error =	Direct Calibration - Calibration Gas Value / SPAN	X 100
% System Bias Error =	Bias Calibration - Direct Calibration / SPAN / SPAN	X 100

RANGE: 20.9

INSTRUMENTATION DATA

RUN 1

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
ZERO	0	0.10%	0.020	NA	NA		NA	0.10%
LOW	12.4	59.00%	12.330	NA	NA		NA	-0.33%
HIGH	20.9	100.10%	20.920	NA	NA		NA	0.10%
BIAS Zero	0	0.14%	0.030	0.14%	0.030		0.00%	0.14%
BIAS Cal	12.4	59.33%	12.400	59.28%	12.390		-0.05%	0.33%

RUN 2

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
BIAS Zero	0	0.14%	0.030	0.14%	0.030		0.00%	0.14%
BIAS Cal	12.4	59.28%	12.390	59.47%	12.430		0.19%	0.48%

RUN 3

	CYLINDER VALUE %	INITIAL ANALYZER RESPONSE CHART READING	%V	FINAL ANALYZER RESPONSE CHART READING	%V		DRIFT %	Cal err % of span
BIAS Zero	0	0.14%	0.030	0.14%	0.030		0.00%	0.14%
BIAS Cal	12.4	59.47%	12.430	59.38%	12.410		-0.10%	0.48%

APPENDIX C
Sampling Log and Chain-of-Custody Records

Summary.log

MidCon Compression Emissions Test
Logged Files

Texas Midstream Gas Services
Ponder Compressor Station
Denton County, Texas
Caterpillar G3516LE
MC1989
1/28/2010

ZER-001.DAT
CAL-001L.DAT
CAL-001H.DAT
M205QA.DAT
NOXCNV.DAT
BIAS-001.DAT
TST-001.DAT
BIAS-002.DAT
TST-002.DAT
BIAS-003.DAT
TST-003.DAT
BIAS-004.DAT

12:00 AM	12:00 AM	0.00
	Method 205	
	imported Data	
	imported Data	

APPENDIX D

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-410401 (REPLAC)
Project No.: 05-71892-001

Customer

AIR LIQUIDE AMERICA L.P.
MID CON
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM012248 **Certification Date:** 29Dec2008 **Exp. Date:** 29Dec2011
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
OXYGEN	12.4	%	+/- 1%	Direct NIST and NMI
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
CAI/110P/V03018	22Dec2008	PARAMAGNETIC

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

OXYGEN

Date: 29Dec2008	Response Unit:%	
Z1 = 0.00000	R1 = 23.20000	T1 = 12.44000
R2 = 23.20000	Z2 = 0.00000	T2 = 12.44000
Z3 = 0.00000	T3 = 12.44000	R3 = 23.21000
Avg. Concentration:	12.43	%

Concentration = A + Bx + Cx2 + Dx3 + Ex4
r = 0.999999

Constants:	A = -0.00568057
B = 0.999821643	C = 0
D = 0	E = 0

APPROVED BY: _____
JEFF CROTEAU

MCET103020

Air Liquide America
Specialty Gases LLC

1290 COMBERMERE STREET, TROY, MI 48083

Phone: 248-589-2950 Fax: 248-589-2134

RATA CLASS

Dual-Analyzed Calibration Standard

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS53405
Project No.: 05-83115-007

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM036432 **Certification Date:** 22Dec2009 **Exp. Date:** 21Dec2012
Cylinder Pressure*:** 1938 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	124	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003744	240.8 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//C828621	03Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE

Date: 14Dec2009	Response Unit:PPM	
Z1 = [illegible]	R1 = 239.8695	T1 = 124.0575
R2 = 240.8976	Z2 = 1.01389	T2 = 124.2331
Z3 = 1.04257	T3 = 124.9736	R3 = 241.0968
Avg. Concentration:	124.2	PPM

Second Triad Analysis

Date: 22Dec2009	Response Unit: PPM	
Z1 = 0.02522	R1 = 241.1489	T1 = 124.5853
R2 = 241.3628	Z2 = 0.24930	T2 = 124.5967
Z3 = 0.41193	T3 = 124.7361	R3 = 241.4051
Avg. Concentration:	124.3	PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 9.99991E-1	
Constants:	A = 0.00000E+0
B = 5.13226E-1	C = 1.73000E-4
D = 0.00000E+0	E = 0.00000E+0

APPROVED BY: _____
Rob McCrandall

MCET103020

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS53405
Project No.: 05-83115-006

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM061287 **Certification Date:** 22Dec2009 **Exp. Date:** 22Dec2011
Cylinder Pressure*:** 1908 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITRIC OXIDE	124	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	124.	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1685	01Sep2010	KAL003486	247.1 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	21Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

NITRIC OXIDE

Date: 14Dec2009 Response Unit:PPM

Z1 = -0.47582	R1 = 489.6392	T1 = 124.5735
R2 = 490.8613	Z2 = 0.30170	T2 = 124.8282
Z3 = 0.63617	T3 = 125.3660	R3 = 491.1154

Avg. Concentration: 124.7 PPM

Second Triad Analysis

Date: 22Dec2009 Response Unit: PPM

Z1 = -0.04702	R1 = 246.4012	T1 = 123.2806
R2 = 246.7293	Z2 = 0.19058	T2 = 123.8694
Z3 = 0.24457	T3 = 124.1196	R3 = 246.8250

Avg. Concentration: 123.9 PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4

r = 9.99953E-1

Constants:	A = 0.00000E+0
B = 1.01662E+0	C = 2.63000E-4
D = 0.00000E+0	E = 0.00000E+0

APPROVED BY: _____
Rob McCrandall

MCET103020

Air Liquide America
Specialty Gases LLC

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS53405
Project No.: 05-83115-008

Customer

AIR LIQUIDE AMERICA
P.O. X10-EMSUP
C/O MID CON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM060783 **Certification Date:** 22Dec2009 **Exp. Date:** 21Dec2012
Cylinder Pressure*:** 1967 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON MONOXIDE	240	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003744	240.8 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	03Dec2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE

Date: 14Dec2009	Response Unit:PPM	
Z1 = 0.02515	R1 = 239.8695	T1 = 239.8361
R2 = 240.3678	Z2 = 1.01389	T2 = 240.0863
Z3 = 1.04257	T3 = 240.1925	R3 = 241.0968
Avg. Concentration:	240.2	PPM

Second Triad Analysis

Date: 22Dec2009	Response Unit: PPM	
Z1 = 0.02522	R1 = 241.1489	T1 = 240.4506
R2 = 241.3628	Z2 = 0.24930	T2 = 240.5968
Z3 = 0.41193	T3 = 240.6071	R3 = 241.4061
Avg. Concentration:	240.0	PPM

Calibration Curve

Concentration = A + Bx + Cx2 + Dx3 + Ex4		
r = 9.999918-1		
Constants:	A = 0.00000E+0	
B = 6.132266-1	C = 1.73000E-4	
D = 0.00000E+0	E = 0.00000E+0	

APPROVED BY: _____
Rob McCrandall

MCET103020

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: X14-FMSUP MIDCON
Project No.: 05-79094-008

Customer

AIR LIQUIDE AMERICA
MIDCON
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL20813 **Certification Date:** 20Aug2009 **Exp. Date:** 20Aug2011
Cylinder Pressure*:** 1948 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITRIC OXIDE	241	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	241.	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1686	01Sep2010	KAL003496	490.0 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	07Aug2009	FTIR

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

NITRIC OXIDE

Date: 13Aug2009	Response Unit: PPM	
Z1 = -0.01171	R1 = 489.2294	T1 = 241.4436
R2 = 489.0786	Z2 = 0.32282	T2 = 241.4695
Z3 = 0.67737	T3 = 241.7198	R3 = 490.3679
Avg. Concentration:	241.4	PPM

Date: 20Aug2009	Response Unit: PPM	
Z1 = 0.49305	R1 = 492.1086	T1 = 241.6823
R2 = 492.5323	Z2 = 0.79017	T2 = 242.2385
Z3 = 1.08541	T3 = 242.7447	R3 = 493.0700
Avg. Concentration:	240.5	PPM

Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 9.99990E-1	
Constants:	A = 0.00000E + 0
B = 9.74312E-1	C = 4.10000E-5
D = 0.00000E + 0	F = 0.00000E + 0

APPROVED BY: _____
Rob McCrandall

Air Liquide America
Specialty Gases LLC

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: DAVID CROFOOT

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-80830-001
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA SPECIALTY GASES

C/O MIDCON COMPRESSION
410 MARTI DRIVE
CLEBURNE TX 76033

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM058040 **Certification Date:** 24Sep2009 **Exp. Date:** 25Sep2011
Cylinder Pressure*:** 1800 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
NITROGEN DIOXIDE	49.4	PPM	+/- 2%	GMIS
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
GMIS NO2/AIR	03Dec2010	ALM058077	107.0 PPM	NITROGEN DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
AMETEK 921/921 CE NO2/AW-921-S281	18Sep2009	UV

APPROVED BY: _____
HILARY THATCHER

MCET103020

Air Liquide America
Specialty Gases LLC

Shipped From:
1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY

GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-82375-001
PO#: PURE STOCK
ITEM #: 05C1841 AL
DATE: 13Nov2009

CYLINDER #: ALM034477
FILL PRESSURE: 02000 PSIG

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	0.5 PPM	< 0.5 PPM

ANALYST: ROBERT LESNIAK

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

Shipped From: 1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-82642-001
PO#: PURE STOCK
ITEM #: 0501030 AL
DATE: 04Dec2009

CYLINDER #: ALM45986
FILL PRESSURE: 02000 PSIG PRODUCT EXPIRATION: 03Dec2012

PURE MATERIAL: AIR CAS# 132259-10-0

GRADE: ACID RAIN CEM 0

PURITY: -

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	20 TO 21%	20 TO 21%

ANALYST: _____

APPENDIX E
Test Participants

TEST PARTICIPANT SIGN IN SHEET

CUSTOMER: Texas Midstream Gas Compression
LOCATION: Ponder CS
SOURCE (S): MC1989
ADDRESS: Justin, TX

DATE: 1-28-10
PERMIT #: 62981
COMPANY CONTACT: Hillary Moseley
PHONE #: 405-935-6113

TEST CONTRACTOR: **MidCon Compression - Emissions Testing**

ADDRESS: 410 Marti Dr.
Cleburne Texas 76063

PHONE #: (817) 556-2462
FAX #: (817) 556-2678

NAME	AFFILIATION	ADDRESS AND PHONE NUMBER
Jeff Anderson	MidCon Compression - Emissions Testing	817-487-2837
Kevin Finkston		817-240-2840
Mike Hardy	Flintrock	903-815-9681
Steve Bomsen	Midcon	817-201-2155

Curriculum Vitae

Jeff David Anderson

Education: Currently attending Hill college for degree in Industrial Matinance

Certifications: Certifications: Caterpillar Gas Engine Basics Caterpillar Gas I, Gas II ADEM III Waukesha ESM, Waukesha GET, EMIT AFR Controls Compliance Controls AFR9 training Altronic Controls EPC110

Quatifications: Mr. Anderson is an Emission Test Technician with experience in this capacity beginning in August 2008. He is thoroughly versed in SUA 40 CFR 60, Texas Commission on Environmental Quality (TCEQ) and New Mexico Air Quality Bureau Compliance and Performance test protocols. He is an expert in the calibration, operation and maintenance of all MidCons laboratory grade emission analysis equipment required to meet the above test protocols. Additionally, he is experienced in implementing the complex computer calculations to provide the necessary test reports. Mr. Anderson resume includes extensive testing of stationary spark and compression ignition engines as well as gas natural gas compressors.

His background experiences include:

MidCon Compression, LLC
Emission Technician

3 years experience Gas engine maintenance and operation.

1 year experience in Gas Engine Testing Methods.

1 year automotive emissions testing S&H Auto Clinic 1995-1996

MidCon LLC. - Emissions Testing Tel#. 817-487-2837
410 Marti Dr.
Cleburne Texas
76033

APPENDIX F
Additional Information

1/28/10

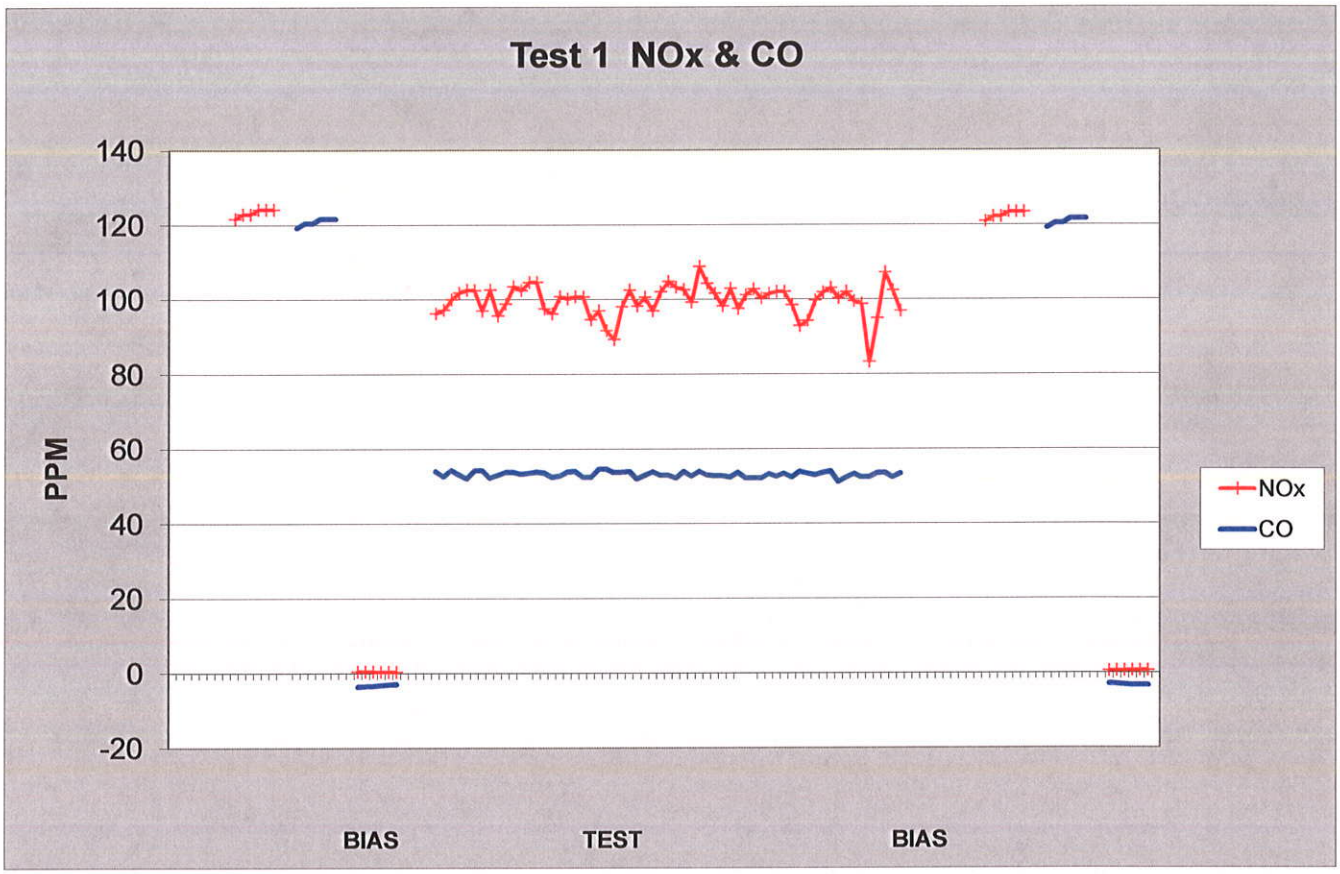
Ponder Compressor Station

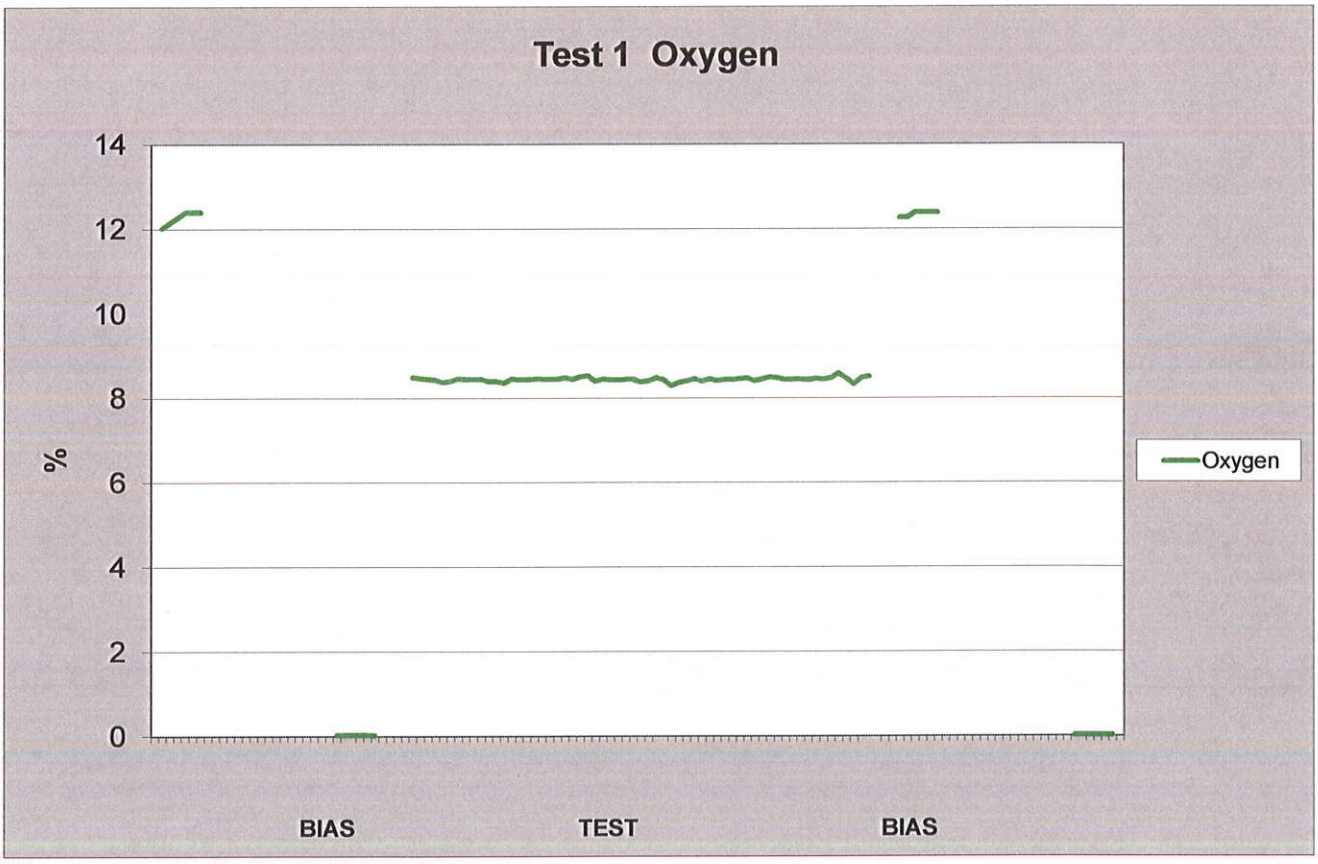
Denton County, Texas

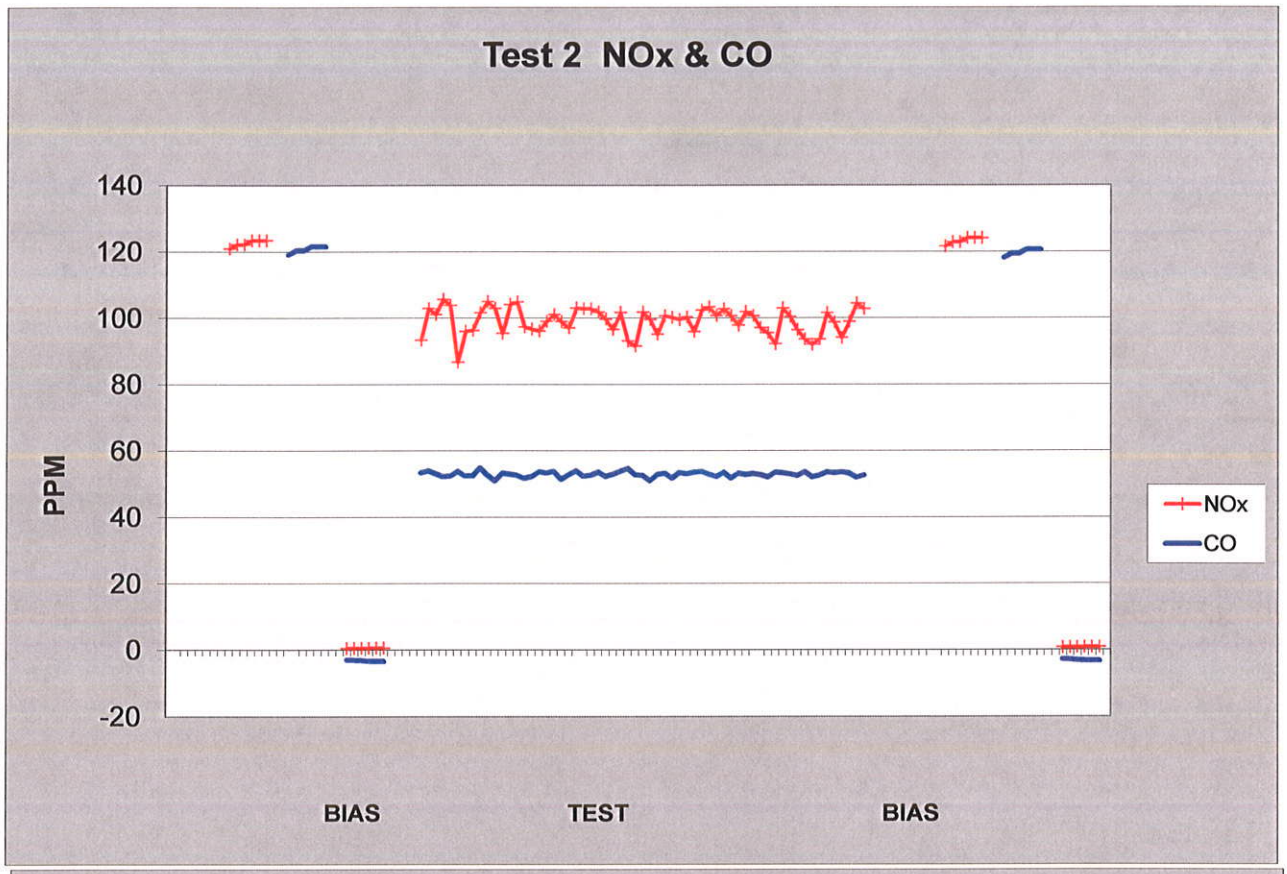
Caterpillar G3516LEMC1989

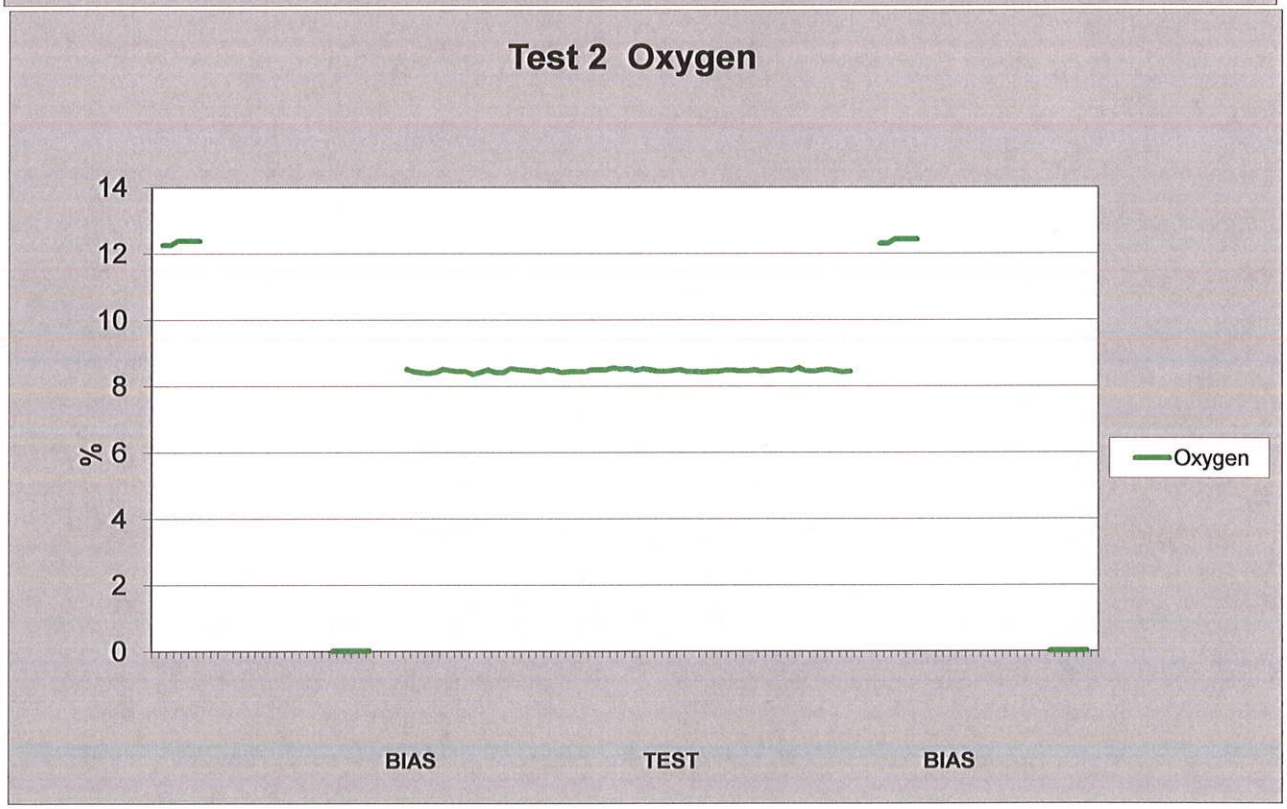
SOC

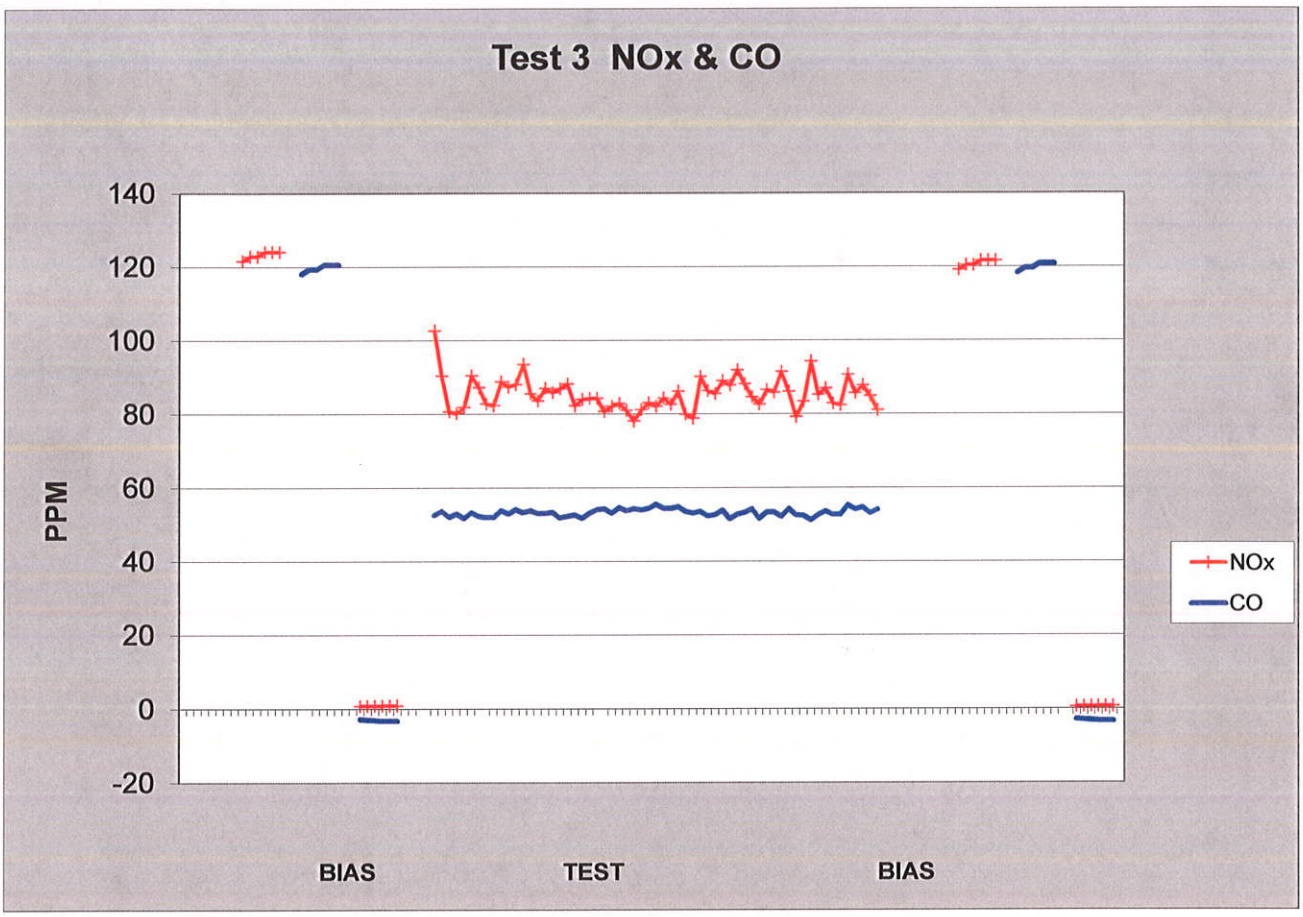
Time	8:55 AM	10:05 AM	11:14 AM
Run No.	TST-001	TST-002	TST-003
Operator	Jeff Anderson		
Ambient Temp	53	46	45
Dy Bulb	0	0	0
Wet Bulb	0	0	0
Ambient Pressure	29.48	29.48	29.47
Sample Source	Stack	Stack	Stack
Exh. Flow (DSCFH)	0	0	0
Fuel Rate (SCFH)	8917	8917	8917
BHP	1132	1132	1132
Ignition Timing	29	29	29
Engine RPM	1200	1200	1200
Boost Press.	0	0	0
Manifold Press.	32	32	32
Manifold Press. Scale	PSIA	PSIA	PSIA
Manifold Temp.	131	129	129
Fuel Header Press.	35	35	35
Suction Press. (psig)	400	400	408
Suction Temp. (F)	58	58	57
Discharge Press. (psig)	1044	1044	1046
Discharge Temp. (F)	143	141	142
Capacity (MMSCFD)	0	15.34	15.34
**********	0	0	0
exh back press.	0	0	0
exh temp.	1150	1150	1150
convertor temp.	0	0	0
o2 sensor mv	0	0	0
convertor diff. Press.	0	0	0

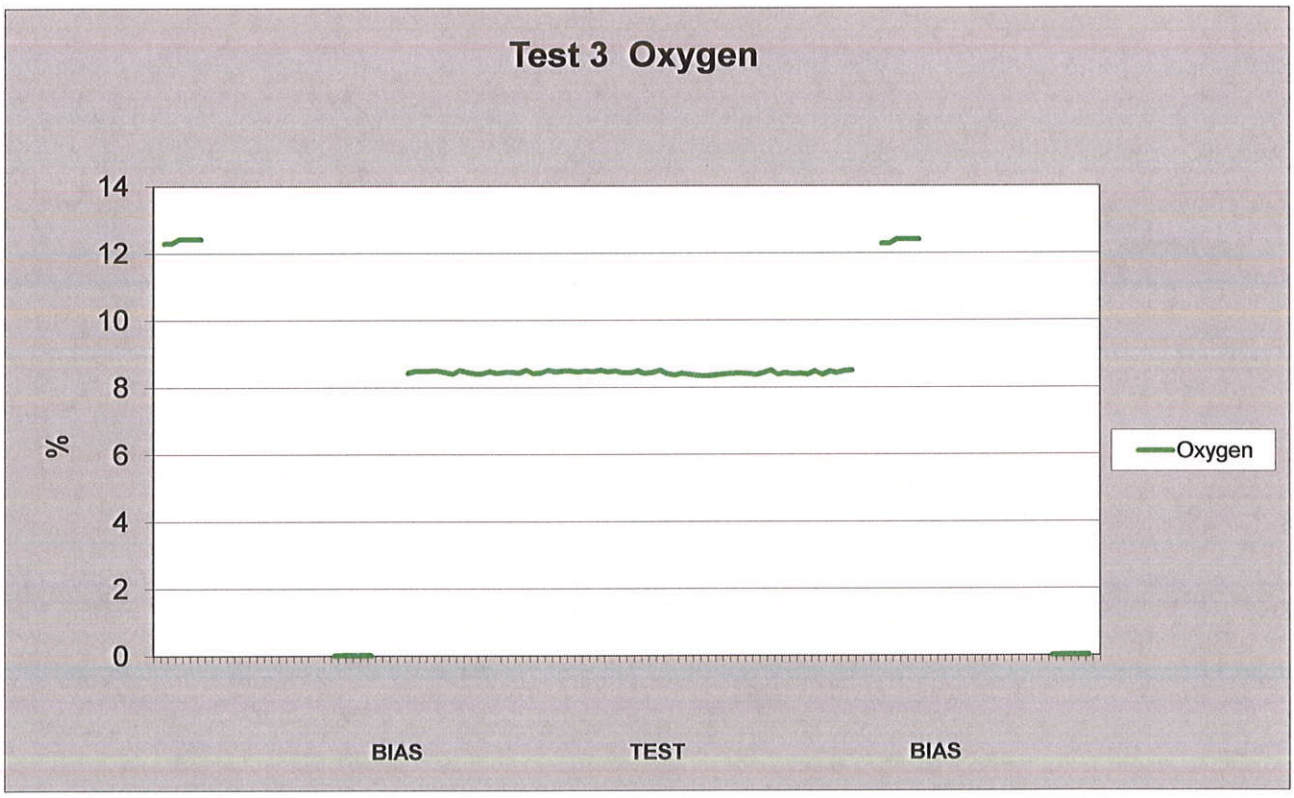

Test 1 NOx & CO
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 1 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen


Test 2 NOx & CO
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 2 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen


Test 3 NOx & CO
140
120
100
80
60
40
20
0
-20
PPM
BIAS
TEST
BIAS
NOx
CO


Test 3 Oxygen
14
12
10
8
6
4
2
0
%
BIAS
TEST
BIAS
Oxygen

Field Data Sheet

*Customer: Texas Midstream Gas Services *Date: 1-28-10

Address _____ * County, State: Denton, TX

*Contact: Hillary Moseley Phone 325-935-6113

		TST-01	TST-02	TST_03	TST-04	TST-05
	Time	0900	1009	1117		
*	Facility	Ponder CS	Ponder CS	Ponder CS		
*						
*	Source Make	Caterpillar	Caterpillar	Caterpillar		
*	Source Model	3516 TALE	3516 TALE	3516 TALE		
*	Unit #	MC1989	MC1989	MC1989		
*	Serial #	WPW00883	WPW00883	WPW00883		
**	Temperature	53	46	45		
	Amb. Press.	29.48	29.48	29.49		
***	Fuel Rate	917 B917				
***	BHP	1132				
	ign timing	29	29	29		
**	rpm	1200	1200	1200		
	boost					
**	manifold press	32	32	32		
**	manifold press scale	psia	psia	psia		
**	manifold temp	131	129	129 129		
**	Fuel Hdr Press.	35	35	35		
				L		
**	Suction Press. (psig)	400	400	468		
	Suction Temp. (F)	58	58	59		
**	Disch press	1044	1044	1046		
	Disch Temp	143	141	142		
**	Capacity	15.34				
	Exh. Temp	1150	1150	1150		
**	Converter Temp					
**	O2 Sensor Reading					
	Presure Diff					
	Temperature Diff					
*	Leak Check					
*	Temps					
*	NOX Convertor					
	ef	669	669	669		
	High Gas	nox	co	ox		
	Mid Gas	nox	co	ox		
	Dilute 1	1	2	3		
	Dilute 2	1	2	3		
	High Gas	1	2	3		

* = manditory ** = Before end of Test 1 *** = Before Start of Test 1

Stack Sketch

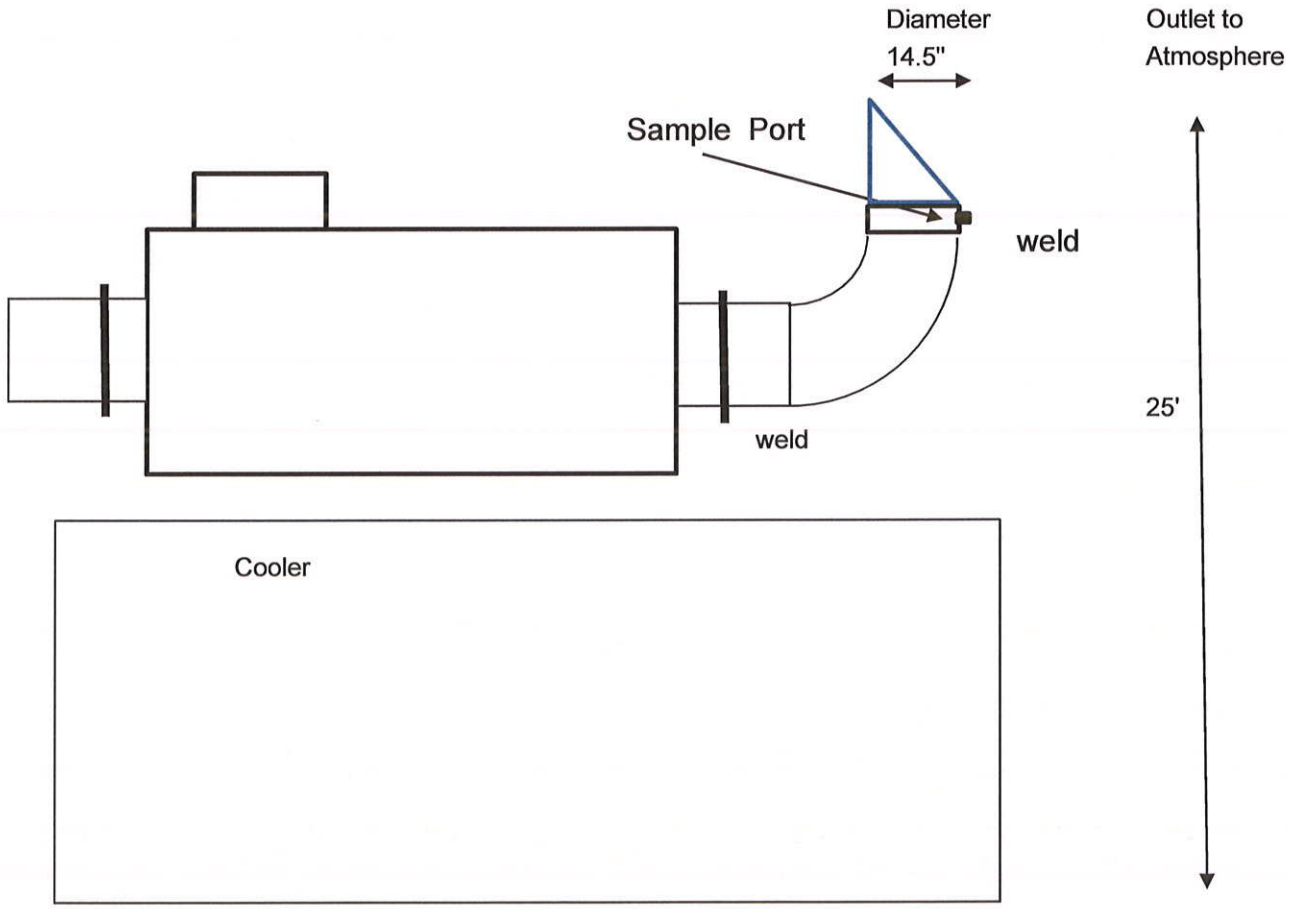
Customer : Texas Midstream Gas Service

Date : 1/28/2010

Location : Denton County, Texas

Facility : Ponder Compressor Station

Unit : MC1989



600 Series
NDIR/O_2 Analyzer

NDIR/02

DESCRIPTION

The California Analytical Models 601-2-3 NDIR/O2 digital analyzer product line is designed around a state of the art 16 bit microprocessor, with 16 digital inputs, 16 digital outputs, 16 analog inputs and 4 analog outputs. The analyzer can be manually operated from the keypad or remotely via TCP/IP, RS-232C communications and discrete inputs. The analyzer display includes screen presentation of all analyzer alarms. Four levels of password protection are provided. For precision measurements, the analyzer's accuracy is increased by entering calibration curve fit polynomials. Automatic calibration may be activated locally or remotely and includes auto calibration via preset times.

METHOD OF OPERATION—NDIR

The California Analytical Instruments' NDIR analyzer is based on the infrared absorption characteristics of gases. Using a single infrared beam to measure gas concentrations, this analyzer produces highly stable and reliable results. A single infrared light beam is modulated by a chopper system and passed through a sample cell of predetermined length containing the gas sample to be analyzed. As the beam passes through the cell, the sample gas absorbs some of its energy. The attenuated beam (transmittance) emerges from the cell and is introduced to the front chamber of a two-chamber infrared microflow detector. The detector is filled with the gas component of interest and consequently the beam experiences further energy absorption. This absorption process increases the pressure in both of the chambers. The differential pressure between the front and rear chambers of the detector causes a slight gas flow between the two chambers. This flow is detected by a mass-flow sensor and is converted into an output signal.

METHOD OF OPERATION - Oxygen

The California Analytical Instruments oxygen analyzer section utilizes either the paramagnetic or fuel cell method to determine the percent level of oxygen contained in the sample gas. The oxygen level is displayed on the LCD panel in percent concentration.

SPECIFICATIONS

IR Analysis Method: Non-Dispersive Infrared (NDIR)
NDIR Components: CO / CO_2 / CH_4 / C_3H_8 / SO_2
Detector Type: Microflow
NDIR Ranges: From 0-50* ppm up to 0-100%
*SO_2, CH_4, C_3H_8 0-250 ppm minimum
Range Ratio: 10:1
Response Time (IR): 90% of Full Scale in < 1 Second**
**Depending on Cell Length, Flow Rate, and Time Constant
IR Sample Cell: Stainless Steel w/ Replaceable gold cell liner
Resolution: Typically 0.1% of Full Scale
Repeatability: Better than 1.0% of Full Scale
Linearity: Better than 1.0% of Full Scale of Factory Calibrated Ranges
Noise: Less than 1% of Full scale of Factory Calibrated Ranges
Zero & Span Drift: Less than 1% of Full Scale per 24 Hours
Zero & Span Adjustment: Via front panel, TCP/IP or RS-232
Sample Flow Rate: 0.5 to 2.0 LPM
Oxygen Analysis Method: Paramagnetic or Fuel Cell
O_2 Ranges: 0-1% (Paramagnetic Only) up to 0-100% O2 Full Scale, Four Definable Ranges
O_2 Response Time: T90—2 Seconds Paramagnetic, 16 Seconds Fuel Cell

600 Series Features:

Outputs available: TCP/IP, RS232, Four Scalable Analog 0-10V / 4-20mA (Allows Offset & Expandable Range DC Analog Outputs)
Discrete Control: Remote/Local Control, Range Change, Range Sense Mode (All TTL Logic)
Discrete Alarms: (Local & Remote Adjustable)
General Fault/TTL Logic (Ground True)
Calibration Failure/TTL Logic (Ground True)
Concentration (2 Each) TTL Logic (Ground True)
Digital Diagnostics: Pressure – Pressure Control Voltages Temperatures – Flow Parameters
Keypad Displays: Factory Settings, TCP/IP address, Passwords(4), Scalable Analog Output Voltages, Full Scale Range Select, Auto Cal Times
Special Features: Auto Ranging, Data Streaming, Auto Calibration (adjustable through internal clock)
Display: 3" x 5" Back lit LCD
Sample Temperature: Up to 50° C, Non-condensing
Ambient Temperature: 5° to 40° C
Ambient Humidity: Less than 90% RH (Non-condensing)
Fittings: ¼ inch Tube
Power Requirements: 115/230 (+/- 10%) VAC; 50/60Hz, 300 watts maximum
Dimensions: 5¼"Hx19"Wx23"D
Weight: 30-45 lbs. (Depending on configuration)

Specifications subject to change without notice.

1312 West Grove Avenue
Orange, CA 92865-4134
Phone: 714-974-5560 Fax: 714-921-2531
www.gasanalyzers.com

Chemiluminescent NO/NOx Analyzer

CLD/HCLD

DESCRIPTION

The California Analytical Instruments Model 600 HCLD NO/NOx digital analyzer is designed around a state-of-the-art 16-bit microprocessor. The 16 bit microprocessor control board consists of the MSR-Card with 16 digital inputs, 16 digital outputs, 16 analog inputs and 4 analog outputs. The analyzer can be manually operated from the keypad or remotely via TCP/IP, RS-232C communications and discrete inputs. The analyzer display includes screen presentation of all analyzer alarms. Four levels of password protection are provided. For precision measurements, the analyzer's accuracy is increased by entering calibration curve fit polynomials.
Automatic calibration may be activated locally or remotely and includes auto cal via preset times.

METHOD OF OPERATION

The California Analytical Model 600 HCLD Analyzer utilizes the principle of chemiluminescence for analyzing the NO or NOx concentration within a gaseous sample. In the NO mode, the method is based upon the chemiluminescent reaction between ozone and nitric oxide (NO) yielding nitrogen dioxide (NO2) and oxygen. This reaction produces light which has intensity proportional to the mass flow rate of NO2 into the reaction chamber. The light is measured by means of a photodiode and associated amplification electronics. In the NOx mode, NO plus NO2is determined as above, however, the sample is first routed through the internal NO2 to NO converter which converts the NO2 in the sample to NO. The resultant reaction is then directly proportional to the total concentration of NOx. Sample enters the analyzer directly into a heated chamber and is maintained at an elevated temperature. The moisture will remain in the vapor state, thus ensuring no loss of the NO2. Local operation is simplified using the 20 button alphanumeric keypad with data presented on a back lit LCD display. All local operations may be performed remote via RS-232 and/or TCP/IP.

SPECIFICATIONS

DETECTOR: Chemiluminescence (CLD) Photodiode (thermally stabilized with Peltier Cooler)
NO/NOx RANGES: 5 to 5,000 ppm NO/NO_X
(Four user programmable ranges)
RESPONSE TIME: Typically < 2 seconds to 90% Full Scale
REPEATABILITY: Better than 0.5% of Full Scale
LINEARITY: Better than 0.5% of Full Scale
NOISE: Typically less than 1% of Full Scale
ZERO & SPAN DRIFT: Less than 1% of Full Scale per 24 Hours
ZERO & SPAN ADJUSTMENT: Via front panel, TCP/IP or RS-232
NH_3 , HCN & SO_2 EFFECT: Not detectable with 100 ppm
CO_2 EFFECT: Less than 2.0% with 10% CO_2
H_2O EFFECT: Less than 0.8% total with chiller
FLOW CONTROL: Electronic Proportional Pressure Controller
SAMPLE FLOW RATE: Typically 1.5 to 2.5 LPM (0.6 LPM with low flow option)
CONVERTER: Vitreous Carbon Material @ 205°C >95% efficiency
OZONATOR: Ultraviolet Lamp
AIR OR O2 REQUIREMENTS: Less than 0.01 ppm NO_X at 240 cc/Min. @ 25 psig (Dew Point < -10°C)
NO/NO_x CONTROL: Manual/Remote/Auto Cycle
OUTPUTS AVAILABLE: TCP/IP, RS232,
Four Scalable Analog 0-10 V / 4-20 mA
DISCRETE ALARMS: (Local & Remote Adjustable)
General Fault/ TTL Logic (Ground True)
Calibration Failure/ TTL Logic (Ground True)
High Concentration (2 each)/ TTL Logic (Ground True)
DIGITAL DIAGNOSTICS: Control Voltages, Temperatures, Pressures, Flow Parameters
KEYPAD DISPLAYS: Factory Settings, TCP/IP Address, Passwords (4), Scalable Analog Output Voltages, Full Scale Range Select, Auto Cal Times
SPECIAL FEATURES: Calculated NO_2 derived from NO_X converter efficiency, Auto Ranging, Auto Calibration (adjustable through internal clock) Less than 3 cc Gold Plated Reaction Chamber
DISPLAY: 3" x 5" Back lit LCD
SAMPLE TEMPERATURE: Up to 50°C Noncondensing on CLD; 85-100°C on HCLD
OVEN TEMPERATURE: 85°C on HCLD; up to 100°C on request
AMBIENT TEMPERATURE: 5 to 40°C
AMBIENT HUMIDITY: Less than 90% RH Noncondensing
WARM-UP TIME: 1 Hour (Typical)
FITTINGS: 1/4 Inch Tube
POWER REQUIREMENTS: 115/230 (±10%) VAC; 50/60 Hz; 200 Watts (350 watts with pump)
DIMENSIONS: 5¼ H x 19 W x 23 D (Inches)
Weight: 45 lbs.

Specifications subject to change without notice.

CAI

1312 West Grove Avenue
Orange, CA 92865-4134
Phone: 714-974-5560 Fax: 714-921-2531
www.gasanalyzers.com

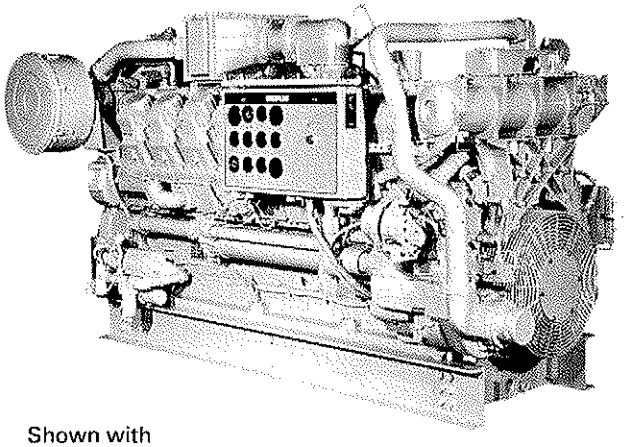
CATERPILLAR®

Gas Industrial Engine

G3516

660-1340 hp

Standard and Low Emission



Shown with
Optional Equipment

SPECIFICATIONS

V-16, 4-Stroke-Cycle, Spark Ignited

Bore—in (mm)	6.7 (170)
Stroke—in (mm)	7.5 (190)
Displacement—cu in (L)	4211 (69.0)
Compression Ratio	
STD	9:1
LE	8:1
Aspiration	Naturally Aspirated or Turbocharged-Aftercooled
Lube Oil Capacity — gal (L)	
STD*	153 (580)
STD**	171 (646)
LE	106 (402)
Jacket Water System — gal (L)	
Capacity w/o Radiator	53 (205)

* Oil fill capacity with 21 elements
**Oil fill capacity without elements

CATERPILLAR ENGINE FACILITIES ISO 9001 CERTIFIED

FEATURES

■ **DIESEL STRENGTH**
All Caterpillar® gas engines are built on diesel frames which means greater service life. Caterpillar gas engines inherit more from their diesel counterparts than just strength. They are backed by the same support system recognized as one of the most sophisticated and dependable in the world.

■ **APPLICATION FLEXIBILITY**
Broad operating speed range and ability to burn a wide spectrum of gaseous fuels.

■ **LOW EMISSIONS**
Low emission engines are capable of NO(x) levels as low as 2.0 grams/hp-hr. Lower emissions may be achievable for selected applications. Consult your Caterpillar dealer.

■ **CATERPILLAR® GAS ENGINES**
Represent the latest technology in engine design. Engines are offered in both naturally aspirated and turbocharged/aftercooled configurations.
TA is offered as standard and low emission.
These different configurations offer:
- High energy ignition systems for consistent firing
- High efficient combustion chamber for complete burning of the fuel.
- Modern component design such as deep cup, oil gallery piston.

■ **ELECTRONIC IGNITION SYSTEM WITH DETONATION SENSITIVE TIMING**
The Caterpillar electronic ignition system provides optimized spark timing for all operating conditions. Timing is automatically controlled to maintain continuous detonation protection.

STANDARD EQUIPMENT

Air cleaners
  single stage, dry, with service indicator
Breather, crankcase
Carburetor
  natural gas
Cooler
  lubricating oil
Filter
  lubricating oil, RH
Flywheel housing
  SAE No. 00
Governor
  Woodward
Ignition system
  Altronic III
Instrument panel, RH
  8 gauge panel (STD)
  12 gauge panel (LE)
  oil pressure
  coolant temperature
  oil pressure differential
  intake manifold temp (TA only)
  pressure (LE)
  service meter
  exhaust pyrometer (LE)
Lifting eyes
Manifold, exhaust
  watercooled
Pumps, gear driven
  aftercooler water (TA only)
  jacket water
Rails, mounting, 10 in.
Regulator, gas pressure
SAE standard rotation
Thermostats and housing
Torsional vibration damper

OPTIONAL EQUIPMENT

Cooling systems
  high temp (LE only)
Exhaust fittings
Muffler
Power takeoffs
Starting systems
Tachometer
Low BTU arrangements
Landfill arrangements
Air head for 3161
CSA ignition
Air-to-air aftercooler connection

CONTINUOUS RATINGS (BHP)

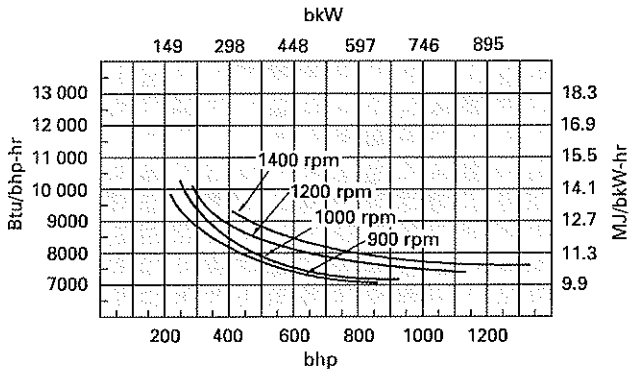
Aspiration	1400 rpm	1300 rpm	1200 rpm	1100 rpm	1000 rpm	900 rpm
LE-90	1340	1245	1150	1050	955	860
LE-130	1265	1175	1085	995	900	810
STD TA-90	–	–	1085	995	905	815
STD TA-130	–	–	1050	960	875	785
STD NA	–	–	660	605	585	525

PHYSICAL FACTORS

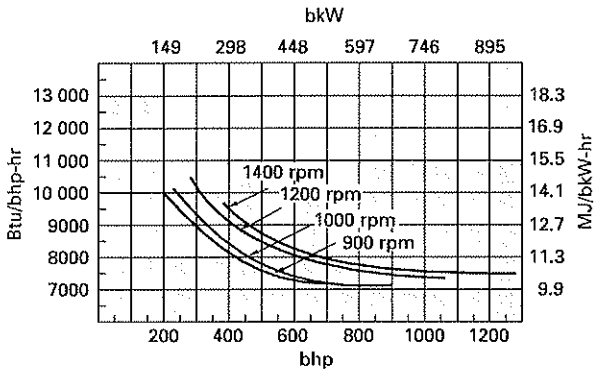
	Height in (mm)	Width in (mm)	Length in (mm)	Weight lb (kg)
LE	73.2 (1859)	67.1 (1703)	131 (3327)	17 670 (8022)
STD TA	73.2 (1859)	67.1 (1703)	131 (3327)	17 470 (7931)
STD NA	75.2 (1911)	61.6 (1564)	126.4 (3211)	16 400 (7446)

FUEL CONSUMPTION

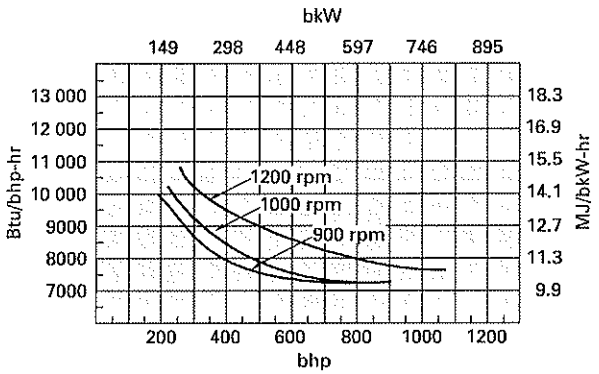
LE-90



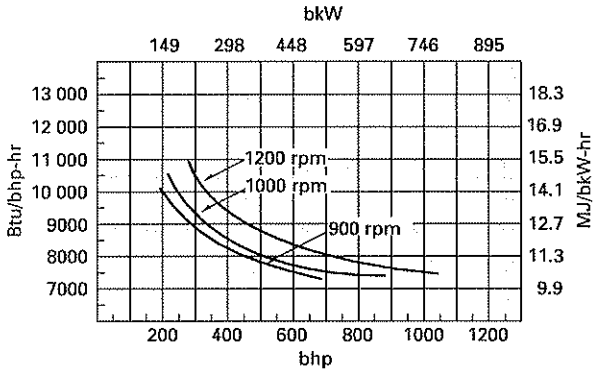
LE-130



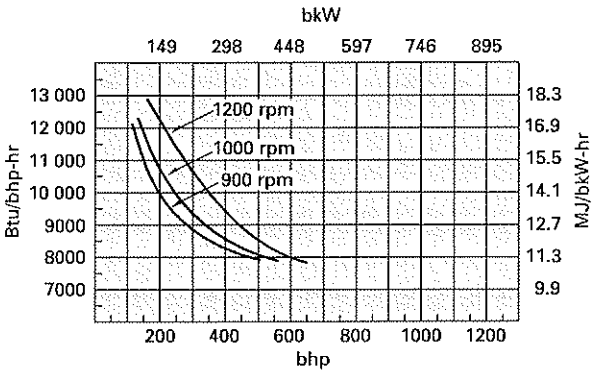
STD TA-90



STD TA-130



STD NA



LE refers to low emission engine configuration.
STD refers to standard engine configuration.
90 refers to aftercooler water inlet temperature in 90° F (32° C).
130 refers to aftercooler water inlet temperature in 130° F (54° C).
All data is based on standard conditions. 77° F (25° C) 500 ft Alt.
These ratings do not allow for overload capability.

G3516 LE

GAS COMPRESSION APPLICATION

GAS ENGINE SITE SPECIFIC TECHNICAL DATA

CATERPILLAR®

ENGINE SPEED (rpm):	1200	FUEL SYSTEM:	HPG IMPCO WITH AIR FUEL RATIO CONTROL
COMPRESSION RATIO:	8:1		
AFTERCOOLER WATER INLET (°F):	130	**SITE CONDITIONS:**	
JACKET WATER OUTLET (°F):	210	FUEL:	Field Gas
COOLING SYSTEM:	JW+OC, AC	FUEL PRESSURE RANGE(psig):	35.0-40.0
IGNITION SYSTEM:	ADEM3	FUEL METHANE NUMBER:	62.2
EXHAUST MANIFOLD:	ASWC	FUEL LHV (Btu/scf):	1027
COMBUSTION:	Low Emission	ALTITUDE(ft):	669
NOx EMISSION LEVEL (g/bhp-hr NOx):	2.0	MAXIMUM INLET AIR TEMPERATURE(°F):	53
SET POINT TIMING:	27.4	NAMEPLATE RATING:	1340 bhp@1400rpm

			MAXIMUM RATING	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
RATING	**NOTES**	**LOAD**	**100%**	**100%**	**75%**	**58%**
ENGINE POWER	(1)	bhp	1148	1148	861	670
INLET AIR TEMPERATURE		°F	54	53	53	53
ENGINE DATA						
FUEL CONSUMPTION (LHV)	(2)	Btu/bhp-hr	7620	7620	7823	8053
FUEL CONSUMPTION (HHV)	(2)	Btu/bhp-hr	8420	8420	8644	8899
AIR FLOW	(3)(4)	lb/hr	10562	10562	7929	6215
AIR FLOW WET (77°F, 14.7 psia)	(3)(4)	scfm	2382	2382	1788	1402
INLET MANIFOLD PRESSURE	(5)	in Hg(abs)	65.0	65.0	51.2	41.3
EXHAUST STACK TEMPERATURE	(6)	°F	904	904	902	903
EXHAUST GAS FLOW (@ stack temp, 14.5 psia)	(7)(4)	ft3/min	6552	6552	4917	3863
EXHAUST GAS MASS FLOW	(7)(4)	lb/hr	10983	10983	8253	6474
EMISSIONS DATA						
NOx (as NO2)	(8)	g/bhp-hr	2.00	2.00	2.00	2.00
CO	(8)	g/bhp-hr	2.02	2.02	2.10	2.18
THC (mol. wt. of 15.84)	(8)	g/bhp-hr	2.38	2.38	2.44	2.51
NMHC (mol. wt. of 15.84)	(8)	g/bhp-hr	0.62	0.62	0.63	0.65
NMNEHC (VOCs) (mol. wt. of 15.84)	(8)(9)	g/bhp-hr	0.42	0.42	0.43	0.44
HCHO (Formaldehyde)	(8)	g/bhp-hr	0.22	0.22	0.20	0.21
CO2	(8)	g/bhp-hr	497	497	503	518
EXHAUST OXYGEN	(10)	% DRY	7.8	7.8	7.7	7.5
HEAT REJECTION						
HEAT REJ. TO JACKET WATER (JW)	(11)	Btu/min	38560	38560	32065	27739
HEAT REJ. TO ATMOSPHERE	(11)	Btu/min	4554	4554	3795	3290
HEAT REJ. TO LUBE OIL (OC)	(11)	Btu/min	5751	5751	4782	4137
HEAT REJ. TO AFTERCOOLER (AC)	(11)(12)	Btu/min	6488	6488	3798	1730

HEAT EXCHANGER SIZING CRITERIA			
TOTAL JACKET WATER CIRCUIT (JW+OC)	(12)	Btu/min	49317
TOTAL AFTERCOOLER CIRCUIT (AC)	(12)(13)	Btu/min	6812
A cooling system safety factor of 0% has been added to the heat exchanger sizing criteria.			

CONDITIONS AND DEFINITIONS

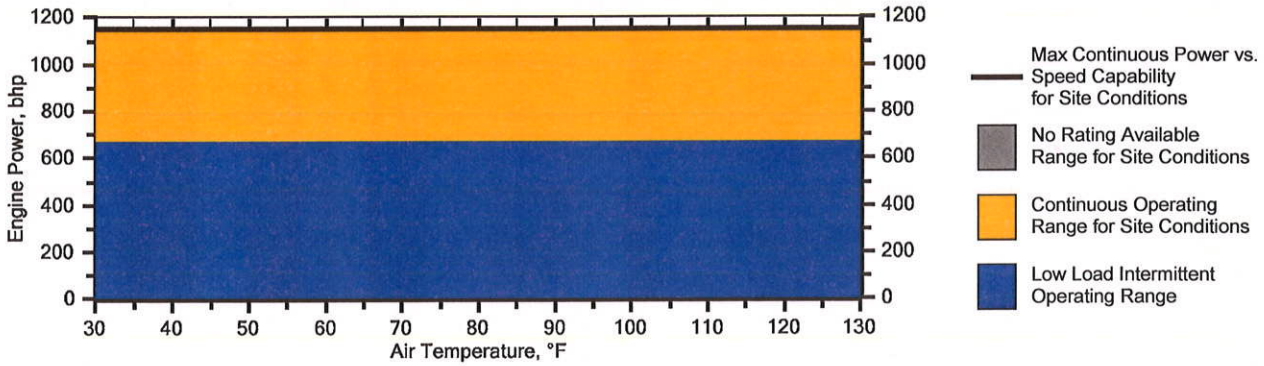
Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature.
100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature.
Max. rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature.
Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

PREPARED BY:
Data generated by Gas Engine Rating Pro Version 3.03.01
Ref. Data Set DM8618-01-001, Printed 28Jan2010

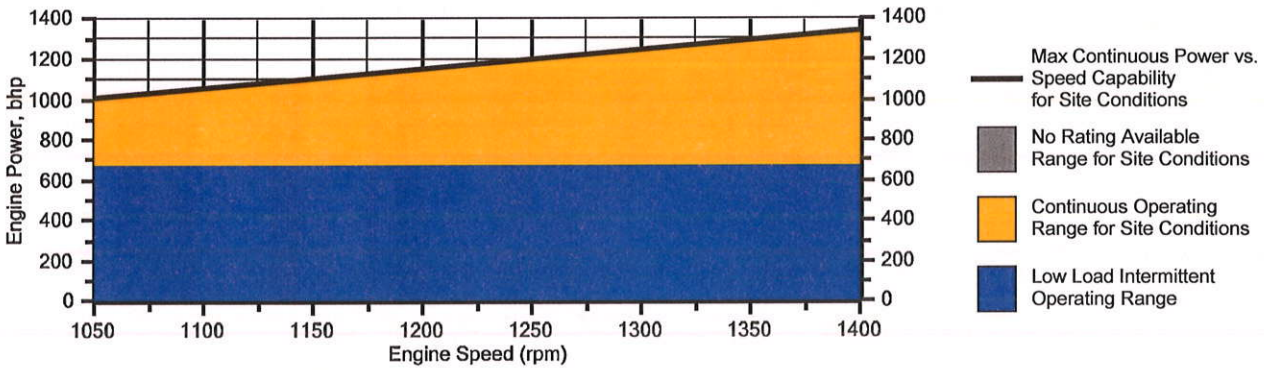
Engine Power vs. Inlet Air Temperature

Data represents temperature sweep at 669 ft and 1200 rpm



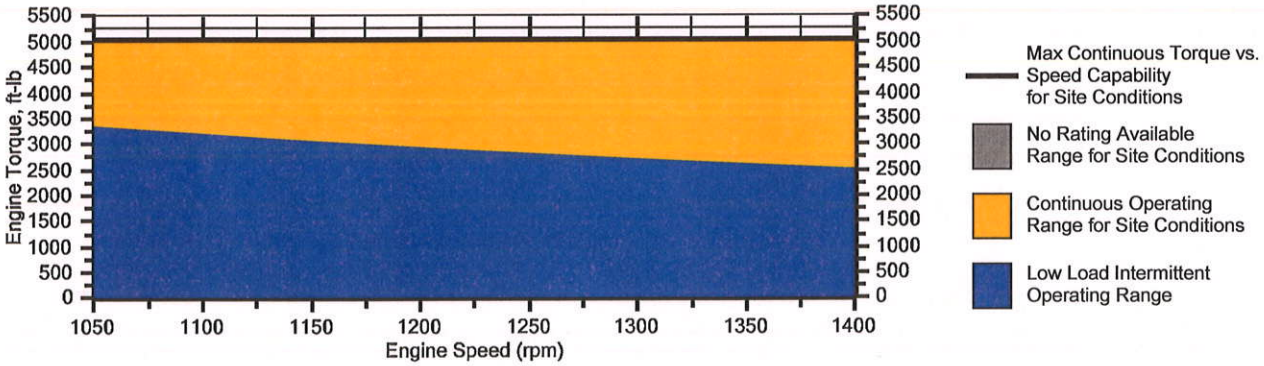
Engine Power vs. Engine Speed

Data represents speed sweep at 669 ft and 53 °F



Engine Torque vs. Engine Speed

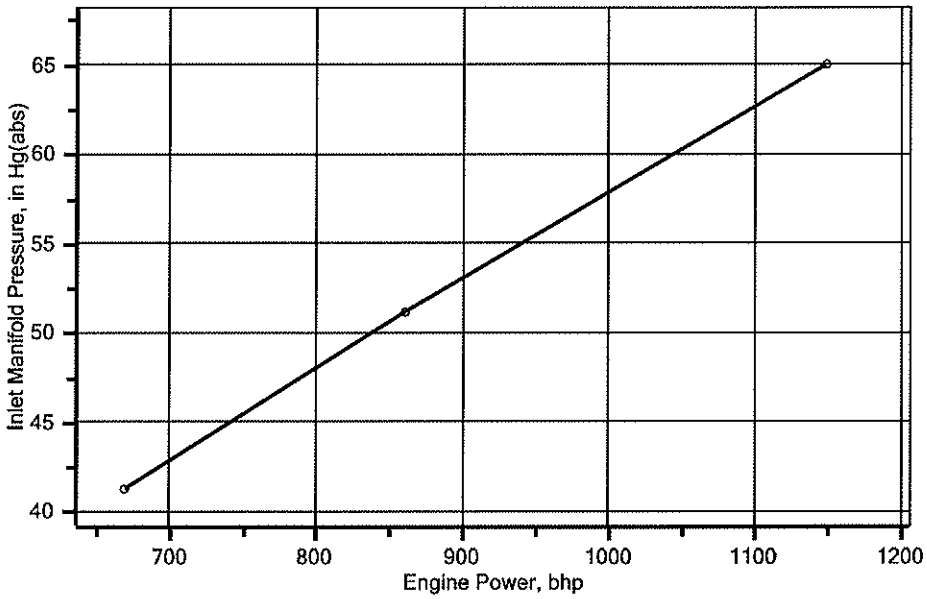
Data represents speed sweep at 669 ft and 53 °F



Note: At site conditions of 669 ft and 53°F inlet air temp., constant torque can be maintained down to 1050 rpm. The minimum speed for loading at these conditions is 1050 rpm.

PREPARED BY:
Data generated by Gas Engine Rating Pro Version 3.03.01
Ref. Data Set DM8618-01-001, Printed 28Jan2010

Engine Power vs. Inlet Manifold Pressure



CERTIFICATE OF ANALYSIS

Number : 2009100056-004A

2440 Chambers Street, Suite A
Venus, TX 76084
817-539-2168 (O)
817-539-2170 (F)

Chesapeake Energy Marketing, Inc.
Terry Harris
5601 East 1st Street

Fort Worth, Texas 76103

Field:	North Barnett	**Report Date:**	10/16/09
Station:	Atmos Ponder Discharge	**Sample Of:**	Spot - Natural Gas
Location:	8017413918	**Sample Date:**	10/08/2009
Sample Point:		**Sample Conditions:**	1103 psi ,107° F
Cylinder # :	8297	**PO / Ref. No.:**	

Comments:
h2s 1 ppm

Analytical Data

Components	Mol %	Wt%	GPM at 14.730 psia	Method	Lab Tech.	Date Analyzed
				GPA-2286		10/12/09
N2	0.5320	0.8591		(MC10)		
METHANE	93.6810	86.6458				
CO2	2.3210	5.8895				
ETHANE	2.9550	5.1227	0.7898			
PROPANE	0.3600	0.9150	0.0991			
I-BUTANE	0.0510	0.1707	0.0167			
N-BUTANE	0.0540	0.1810	0.0170			
I-PENTANE	0.0160	0.0663	0.0059			
N-PENTANE	0.0110	0.0455	0.0040			
HEXANES	0.0066	0.0324	0.0027			
HEPTANES PLUS	0.0124	0.0720	0.0053			
TOTALS	100.0000	100.0000	0.9405			

CALCULATED VALUES

	TOTAL	C6+	C7+
MOLECULAR WEIGHT	17.345	95.511	101.062
REAL DRY BTU AT 14.73 PSIA, 60 °F	1017.60	5151.90	5395.50
REAL WET BTU AT 14.73 PSIA, 60 °F	1000.80	5063.10	5302.50
RELATIVE DENSITY	0.5999	3.3037	3.4992

	TOTAL	C2+	IC5+
GPM's AT 14.73 PSIA, 60 °F	0.9405	0.9405	0.0179

COMPRESSIBILITY FACTOR 0.9978

Laboratory Manager

Chesapeake ENERGY

March 25, 2010

VIA CERTIFIED MAIL # 7009 0960 0001 1891 8337

Emission Inventory Data, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Texas Midstream Gas Services, LLC
Emissions Inventory Account No. JHA001A
Ponder Compressor Station - RN105354062

Dear Sir or Madam:

Texas Midstream Gas Services, LLC (TMGS) hereby submits the 2009 Emissions Inventory for the referenced compressor station.

If you have any questions, please contact me at (405) 935-6113 or by email at hillary.moseley@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
EHS Coordinator
Chesapeake Energy

Enclosure: 2009 Emission Inventory

Chesapeake Energy Marketing, Inc.
Operations Pipeline and Facilites • P.O. Box 54368 • Oklahoma City, OK 73154-1368
405.848.8000 • fax 405.767.4615

7009 0960 0001 1891 8337

Please return Receipt to:
Amanda Rios
One Grand Blvd.#218

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

USPS 73118-9998 OKLAHOMA CITY, OK MAR 25 2010

Sent To Pondex, TX

Street, Apt. No.; or PO Box No.

City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Pondex, TX

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Emission Inventory Data, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (*Printed Name*)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

PASSCOPA MAR 29 2010

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7009 0960 0001 1891 8337

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Flatrock Engineering & Environmental, Ltd.

9341 E. Lake Highlands Dr.
Dallas, Texas 75218
P 214-320-8804
F 801-340-4696

March 22, 2010

Emissions Inventory Section, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

VIA REGULAR MAIL

or

Emissions Inventory Section, MC 166
Texas Conservation on Environmental Quality
12100 Park 35 Circle, Bldg. E., Third Floor
Austin, Texas 78753

VIA OVERNIGHT MAIL

RE: 2009 Emissions Inventory
Texas Midstream Gas Services LLC (Texas Midstream)
CN-603104530
Ponder Compressor Station (Facility)
RN-105354062
Denton County, Texas

To Whom It May Concern:

Flatrock Engineering and Environmental, Ltd., on behalf of our client, Texas Midstream, hereby submits the 2009 Emissions Inventory for the referenced compressor station.

If you have any questions or need additional information, please call.

Sincerely,

Mark Martelli

Mark Martelli, P.E.
Consultant

Enclosures

cc: Brandi Johnson – Texas Midstream

2009 EMISSION INVENTORY
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Texas Midstream Gas Services LLC
Ponder Compressor Station

Prepared For:

Texas Midstream Gas Services LLC
6100 N. Western Avenue
Oklahoma City, OK 73118

Prepared by:

Flatrock Engineering and Environmental, Ltd.
9341 E. Lake Highlands Dr.
Dallas, Texas 75218

March, 2009

2009 TCEQ Emissions Inventory Questionnaire

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EIQ REPORT

RN: RN105354062
ACCOUNT: DFA173Q
COMPANY: TEXAS MIDSTREAM GAS SERVICES LLC
DATE - Nov. 19, 2009

ACCOUNT INFORMATION

EIQ Year:2009

RN:RN105354062 Account:DFA173Q

Company:TEXAS MIDSTREAM GAS SERVICES LLC

Last EI Date:12/31/2008

Company is Owner/Operator:BOTH Site Independently Owned (Y/N):___ No. of Employees:0

Site Name:PONDER COMPRESSOR STATION

Primary SIC:1311-CRUDE PETROLEUM & NATURAL GAS

Secondary SIC:1311-CRUDE PETROLEUM & NATURAL GAS

Location:3.5 M S OF PONDER ON HWY 156

Near City:PONDER County:DENTON Region:4

UTM Zone:14

UTM North Meters:3666650.762

UTM East Meters: 658873.633

Latitude: 330737.0000

Longtitude: 971749.00

Site Status:O Oper Schedule: 24 hr/day, 7 da/wk, 52 wk/yr Tot Oper Hrs:8760

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)

Spring: 25% Summer: 25% Fall: 25% Winter: 25%

EMISSIONS INVENTORY CONTACT INFORMATION

Name:~~MARTELLI, MARK~~ Brandi Johnson Title:~~CONSULTANT~~ EHS Specialist

Mailing Address:~~9341 E LAKE HIGHLAND~~S DR P.O. Box 18496

City:~~DALLAS~~ Oklahoma City State:~~TX~~ OK Zip Code:~~75218~~- 73154-0496

Bus Phone:~~(214) 320-8804~~X (405) 935-4082 Fax:~~(801) 340-4696~~ (405) 849-4882 Email:~~MARK.MARTELLI@FLATROCKENERGY.N~~

PLANT CONTACT INFORMATION

Name:ALDER, DENNIS Title:~~EH&S COORDINATOR~~ EHS Field Coordinator Midstream

Mailing Address:~~5657~~ 5601 E 1ST ST

City:FORT WORTH State:TX Zip Code:~~76103~~ 76052

Bus Phone:~~(817) 239-3990X~~ (682) 647-3980 Fax:~~(801) 340-4696~~ (817) 759-0144 Email:DALDER@CHKENERGY.COM dennis.alder@chk.com

ACCOUNT INFORMATION
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

Last EI Date:12/31/2008

CRITERIA EMISSIONS TOTALS

Class	Annual (TPY)/Current	Ozone (PPD)/Current	SMSS (TPY)/Current	EE (TPY)/Current	EE/SMSS(TPY)
PM10	2.2000/ 2.31	12.0500/ 12.66	0.0000/	0.0000/	0.0000
PB	0.0000/	0.0000/	0.0000/	0.0000/	0.0000
SO2	0.8000/ 0.28	4.3770/ 1.534	0.0000/	0.0000/	0.0000
NOX	31.7900/ 34.18	174.1900/ 187.29	0.0000/	0.0000/	0.0000
CO	20.4400/ 27.61	111.9900/ 151.29	0.0000/	0.0000/	0.0000
VOC	5.9100/ 5.94	32.3720/ 32.55	0.0300/ 0.17	0.0000/	0.0300 0.17
PM2.5	2.2000/ 2.31	12.0500/ 12.66	0.0000/	0.0000/	0.0000

SITE QUANTIFIABLE EVENT TOTALS

Note:
Report TOTAL NUMBER of each event type for the reported EIQ Year per 30 TAC Sections 101.201 and 101.211.

Reportable Emission Events: 0
Non-Reportable Emission Events: 0
Reportable Scheduled Maintenance, Startup, or Shutdown Activities: 0
Non-Reportable Scheduled Maintenance, Startup, or Shutdown Activities: 146
Excess Opacity Events: 0

ACCOUNT INFORMATION
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

Last EI Date:12/31/2008

Emissions Events Certification

Pursuant to Texas Health and Safety Code 382.0215(f). I do hereby certify that 'NO Emissions Events' were experienced at this account during the Emissions Inventory Reporting Calendar year.
(Sign here if and only if you reported no emissions from emission events.)

Signature _____

Signature of Legally Responsible Party

I do hereby certify that information reported in this inventory is true, accurate, and fully represents the emissions that occurred during the Emissions Inventory Reporting Calendar year to the best of my knowledge.

_____	_____	_____
Signature	Title	Phone
_____	_____	_____
Printed Name	Date	Fax

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2009

FIN:FUG EPN:FUG
Comment:

FACILITY INFORMATION

FIN:FUG Facility Name:SITE FUGITIVES Plant ID:

Comment:

SCC:31000220 Description:OIL & GAS PRODUCTNATURAL GAS PRODUALL EQUIPMENT
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:0 Percentage Max Capacity:0 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:EQUIPLKFUG

Profile:EQUIPMENT LEAK FUGITIVES

Characteristic	Value	Unit	Characteristic	Value	Unit
% VOC IN GAS/VAP	5	%	% VOC IN LT LIQUID	-----	----
CALCULATION METHOD	OIL&GAS	----	CNCTR MONITORNG PRGM	-----	----
LDAR PROG IN USE Y/N	NO	----	LDAR PROG SPECIFIED	-----	----
LDAR PROGRAM REASON	-----	----	SCRN VALUE MAX	-----	----
SCRN VALUE MIN	-----	----	SCRN VALUE PEG COMPS	-----	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:FUG EPN:FUG
Comment:

EMISSION POINT INFORMATION

EPN:FUG Point Name:SITE FUGITIVES

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:FUGITIVE

Characteristic	Value	Unit
DEGREES	0	DEGREES
HEIGHT	5	FEET
LENGTH	200	FEET
OFNORTH	-----	----
WIDTH	200	FEET

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: _____ MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
50001	0	VOC-UNCLASSIFIED	A	0.2200 0.06	1.2000 0.3288	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:FUG EPN:FUG
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2009

FIN:G1 EPN:G1
Comment:

FACILITY INFORMATION

FIN:G1 Facility Name:DIESEL GENERATOR (BACKUP) Plant ID:

Comment:

SCC:20100102 Description:ELECTRIC GENERATNDIST.OIL/DIESEL RECIPROCATING
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:~~2877~~ 715 Percentage Max Capacity:~~33~~ 8.2 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	-----	----	CYCLE	-----	----
ENGINE RATING	250	HP	FIRING TYPE	-----	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:G1 EPN:G1
Comment:

EMISSION POINT INFORMATION

EPN:G1 Point Name:DIESEL GENERATOR STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	0.25	FEET
HEIGHT	10	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	1000	DEG F
VELOCITY	200	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 1,251 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:G1 EPN:G1
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	0.7900 0.20	4.3300 1.096	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	0.7900 0.20	4.3300 1.096	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	0.7900 0.20	4.3300 1.096	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	A	0.8900 0.22	4.8800 1.205	0.0000	0.0000	0.0000
51680	50000	FORMALDEHYDE	A	0.4200 0.11	2.3000 0.6027	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	A	11.1500 2.77	61.1000 15.18	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	A	0.7400 0.18	4.0500 0.9863	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	A	2.4000 0.60	13.1500 3.288	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2009

FIN:MC1973 EPN:MC1973
Comment:

FACILITY INFORMATION

FIN:MC1973 Facility Name:WAUKESHA L5794 GSI Plant ID:

Comment:

SCC:20200253 Description:INDUSTRIAL NATURAL GAS 4-CYCLE RICH BURN
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:~~5571~~ 8335 Percentage Max Capacity:~~63~~ 95.1 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	RICH	----	CYCLE	4	CYCLE
ENGINE RATING	1380	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1973 EPN:MC1973
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC1973 Name:NSCR FOR MC1973

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~5571~~ 8335 % Time Off Line: ~~63~~ 0 IM Schedule:Q

Control Efficiencies:

VOC:	60.00%	NOX:	96.50%	CO:	90.00%	IOC:	0.00%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%	C1-C3:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%		

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1973 EPN:MC1973
Comment:

EMISSION POINT INFORMATION

EPN:MC1973 Point Name:WAUKESHA L5794 GSI STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.17	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	0	%
TEMP	1135	DEG F
VELOCITY	99	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 86,267 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1973 EPN:MC1973
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	0.5600 0.84	3.0700 4.603	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	0.5600 0.84	3.0700 4.603	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	0.5600 0.84	3.0700 4.603	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	0.9200 1.37	5.0400 7.507	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	V	4.1200 6.17	22.5700 33.81	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	0.0200 0.03	0.1090 0.1644	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	7.3700 11.03	40.3800 60.44	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2009

FIN:MC1989 EPN:MC1989
Comment:

FACILITY INFORMATION

FIN:MC1989 Facility Name:CATERPILLAR G3516LE Plant ID:

Comment:

SCC:20200256 Description:INDUSTRIAL NATURAL GAS 4-CYCLE CLEAN BUR
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:~~5547~~ 8571 Percentage Max Capacity:~~63~~ 97.8 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	LEAN	----	CYCLE	4	CYCLE
ENGINE RATING	1340	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1989 EPN:MC1989
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC1989 Name:OXIDATION CATALYST FOR MC1989

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~5547~~ 8571 % Time Off Line: ~~63~~ 0 IM Schedule:

Control Efficiencies:

VOC:	50.00%	NOX:	0.00%	CO:	80.00%	IOC:	0.00%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%	C1-C3:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%		

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1989 EPN:MC1989
Comment:

EMISSION POINT INFORMATION

EPN:MC1989 Point Name:CATERPILLAR G3516 LE STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.0	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	855	DEG F
VELOCITY	127	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 86,667 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC1989 EPN:MC1989
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	0.2800 0.43	1.5300 2.356	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	0.2800 0.43	1.5300 2.356	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	0.2800 0.43	1.5300 2.356	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	1.8800 2.91	10.3000 15.94	0.0000	0.0000	0.0000
51680	50000	FORMALDEHYDE	V	0.5100 0.79	2.7900 4.329	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	V	12.2900 18.99	67.3400 104.05	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	0.0200 0.03	0.1090 0.1644	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	3.1100 4.81	17.0400 26.36	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2009

FIN:MC2209 EPN:MC2209
Comment:

FACILITY INFORMATION

FIN:MC2209 Facility Name:WAUKESHA L5794 GSI Plant ID:

Comment:

SCC:20200253 Description:INDUSTRIAL NATURAL GAS 4-CYCLE RICH BURN
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:~~5711~~ 8444 Percentage Max Capacity:~~85~~ 96.4 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	RICH	----	CYCLE	4	CYCLE
ENGINE RATING	1380	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC2209 EPN:MC2209
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC2209 Name:NSCR FOR MC2209

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~5711~~ 8444 % Time Off Line: ~~65~~ 0 IM Schedule:Q

Control Efficiencies:

VOC:	60.00%	NOX:	96.50%	CO:	90.00%	IOC:	0.00%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%	C1-C3:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%		

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC2209 EPN:MC2209
Comment:

EMISSION POINT INFORMATION

EPN:MC2209 Point Name:WAUKESHA L5794 GSI STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.17	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	1135	DEG F
VELOCITY	99	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 87,395 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

FIN:MC2209 EPN:MC2209
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	0.5700 0.95	3.1200 4.657	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	0.5700 0.95	3.1200 4.657	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	0.5700 0.95	3.1200 4.657	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	0.9400 1.39	5.1500 7.616	0.0000	0.0000	0.0000
51680	50000	FORMALDEHYDE	V	0.1300 0.19	0.7120 1.041	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	V	4.2300 6.25	23.1800 34.25	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	0.0200 0.03	0.1090 0.1644	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	7.5600 11.17	41.4200 61.20	0.0000	0.0000	0.0000

This is the last page of report

Emission Calculations

CRITERIA EMISSIONS SUMMARY - 2009 EIQ

Owner/Operator: Texas Midstream Gas Services, LLC
Facility: Ponder Compressor Station

Facility Name	Facility ID # (FIN)	Facility ID # (EPN)	2009 NOx Emissions		2009 CO Emissions		2009 VOC emissions		2009 PM Emissions		2009 SO2 Emissions	
			Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr
Compressor 1 (5794)	MC1973	MC1973	6.17	1.48	11.03	2.65	1.37	0.33	0.84	0.20	0.03	0.01
Compressor 2 (5794)	MC2209	MC2209	6.25	1.48	11.17	2.65	1.39	0.33	0.85	0.20	0.03	0.01
Compressor 3 (3516)	MC1989	MC1989	18.99	1.48	4.81	1.12	2.91	0.68	0.43	0.10	0.03	0.01
Generator Engine 1 (Backup)	G1	G1	2.77	7.75	0.60	1.67	0.22	0.62	0.20	0.55	0.18	0.51
Site Fugitives	FUG	FUG	NA	NA	NA	NA	0.06	0.01	NA	NA	NA	NA
		SUBTOTALS:	**34.18**	**12.19**	**27.61**	**8.09**	**5.94**	**1.97**	**2.31**	**1.05**	**0.28**	**0.53**
MSS Emissions[1]	MC1973	MC1973	NA	NA	NA	NA	0.076	2.29	NA	NA	NA	NA
	MC2209	MC2209	NA	NA	NA	NA	0.053	2.29	NA	NA	NA	NA
	MC1989	MC1989	NA	NA	NA	NA	0.041	2.29	NA	NA	NA	NA
		SUBTOTALS:	**0.00**	**0.00**	**0.00**	**0.00**	**0.17**	**6.87**	**0.00**	**0.00**	**0.00**	**0.00**
		TOTALS:	**34.18**	**12.19**	**27.61**	**8.09**	**6.11**	**8.84**	**2.31**	**1.05**	**0.28**	**0.53**

[1] MSS Blowdown Calculation:

2.29 lbs VOC/MSS blowdown. Example Calc: MC1973, 66 blowdowns x 2.29 lbs/blowdown / 2000 lbs/ton = 0.076 tons VOC for 2008. MC2209: 46 blowdowns, MC1989: 36 blowdowns. VOC/blowdown calculation follows.

Facility: Ponder Compressor Station
Facility Name: Compressor 1 (5794) Compressor 3 (3516)
Compressor 2 (5794)

FIN: MC1973 MC1989
MC2209

EPN: MC1973 MC1989
MC2209

CIN: CCMC1973 CCMC1989
CCMC2209

EMISSION CALCULATIONS:

Methodology: Emission factors are from manufacturer's data (attached).

NMHC factor (0.27 and 0.46 g/hp-hr respectively) used as VOC factor for safety.

Typical oxidative catalytic converter reductions taken below for Caterpillar G3516 LE (C3). Oxidative catalyst specifications can be provided upon request.

EPN:

	MC1973 Compressor 1 (5794)	MC2209 Compressor 2 (5794)	MC1989 Compressor 3 (3516)
Engine Model:	Wauk 5794	Wauk 5794	Cat 3516
Rated Horsepower:	1,380	1,380	1,340
Max Annual Runtime (hrs/year):	8,760	8,760	8,760
2009 Runtime (hrs/year):	8,335	8,444	8,571
Ozone Operating Schedule (hr/day):	24	24	24
BTU/scf:	1,000	1,000	1,000
BTU/hp-hr:	7,500	7,500	7,546
Fuel Used (MMBTU/hr):	10.350	10.350	10.112
Fuel Used (Mscf/hr):	10.35	10.35	10.11
Fuel Used (MMscf/yr):	86.267	87.395	86.667
Fuel Used (MMBtu/yr):	**86,267**	**87,395**	**86,667**

EPN	Pollutant	Emission Factors (g/hp-hr) or (lb/MMBTU) or (gr S/100 scf)	Pre Converter lb/hr	Pre Converter tpy	Post Converter/ PTE lb/hr	Post Converter/ PTE tpy	2009 Emissions lb/hr	2009 Emissions tpy	Converter Reductions	Catalytic Converter Methodology		Post-Conv g/hp-hr
MC1973	NOx	13.9	42.29	176.24	1.48	6.48	1.48	6.17	96.50%			0.487
	CO	8.7	26.47	110.31	2.65	11.59	2.65	11.03	90.00%			0.870
	VOC	0.27	0.82	3.42	0.33	1.44	0.33	1.37	60.00%			0.108
	Formaldehyde	0.05	0.15	0.63	0.05	0.20	0.05	0.19	70.00%			0.015
	PM	*0.01941*	0.20	0.84	0.20	0.88	0.20	0.84	NA			NA
	SO2	*0.25*	0.0074	0.03	0.01	0.03	0.01	0.03	NA			NA
MC2209	NOx	13.9	42.29	178.54	1.48	6.48	1.48	6.25	96.50%			0.487
	CO	8.7	26.47	111.75	2.65	11.59	2.65	11.17	90.00%			0.870
	VOC	0.27	0.82	3.47	0.33	1.44	0.33	1.39	60.00%			0.108
	Formaldehyde	0.05	0.15	0.64	0.05	0.20	0.05	0.19	70.00%			0.015
	PM	*0.01941*	0.20	0.85	0.20	0.88	0.20	0.85	NA			NA
	SO2	*0.25*	0.01	0.03	0.01	0.03	0.01	0.03	NA			NA
MC1989	NOx	1.5	4.43	18.99	4.43	19.41	4.43	18.99	NA			NA
	CO	1.9	5.61	24.05	1.12	4.92	1.12	4.81	80.00%			0.380
	VOC	0.46	1.36	5.82	0.68	2.98	0.68	2.91	50.00%			0.230
	Formaldehyde	0.25	0.74	3.16	0.18	0.81	0.18	0.79	75.00%			0.063
	PM	*0.00999*	0.10	0.43	0.10	0.44	0.10	0.43	NA			NA
	SO2	*0.25*	0.01	0.03	0.01	0.03	0.01	0.03	NA			NA
TOTALS:	NOx		89.01	373.77	7.39	32.37	7.39	31.41				
	CO		58.55	246.11	6.42	28.10	6.42	27.02				
	VOC		3.00	12.71	1.34	5.85	1.34	5.67				
	Formaldehyde		1.04	4.44	0.28	1.21	0.28	1.17				
	PM		0.50	2.12	0.50	2.20	0.50	2.12				
	SO2		0.02	0.09	0.02	0.10	0.02	0.09				

Facility: Ponder Compressor Station
Facility Name: Generator Engine 1 (Backup)

FIN: G1
EPN: G1

EMISSION CALCULATIONS:

Methodology: Emission factors are from AP-42, Table 3.3-1 and Table 3.3-2 (Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, Version 10/96).

EPN:

	G1 Generator Engine 1 (Backup)
	Diesel Generator Engine
Rated Horsepower:	250
2009 runtime (hrs/year):	715
Ozone Operating Schedule (hr/day):	24
BTU/lb:	19,300
BTU/hp-hr:	7,000
Fuel Used (MMBTU/hr):	1.750
Fuel Used (Mlbs/hr):	0.09
Fuel Used (MMlbs/yr):	0.065
Fuel Used (MMBtu/yr):	**1,251**

EPN	Pollutant	Emission Factors (lb/hp-hr)	2009 lb/hr	2009 tpy	Converter Reductions	Catalytic Converter Methodology		Post-Conv: g/hp-hr
G1	NOx	0.0310	7.75	2.77	NA			NA
	CO	0.00668	1.67	0.60	NA			NA
	VOC	0.00247	0.62	0.22	NA			NA
	Formaldehyde	0.00118	0.30	0.11	NA			NA
	PM	0.0022	0.55	0.20	NA			NA
	SO2	0.0021	0.51	0.18	NA			NA

Facility: Ponder Compressor Station
Emission Unit: Site Fugitives
Stack ID(s): FUG

Methodology

Emission factors are taken from a TNRCC internal memo dated January 3, 1996. Subject: Equipment Leak Factors for Oil and Gas Production Operations. Factors based on data collected by API. Stream VOC Wt% equals 1.25 from inlet gas analysis.

Calculations

SOURCE	FACTOR	STREAM	COUNT	REDUCT'S	SOURCE	TONS/YR
API	0.00992	1.25%	67	0.0%	SYSTEM VALVES	0.04
API	0.01940	1.25%	8	0.0%	RELIEF VALVES	0.01
API	0.00441	1.25%	0	0.0%	OPEN ENDED LINES	0.00
API	0.01940	1.25%	3	0.0%	COMPRESSOR SEALS	0.00
API	0.00044	1.25%	300	0.0%	CONNECTIONS	0.01
					TOTAL	**0.06**

Chesapeake Energy Marketing, Inc.
Ponder Compressor Station

VOC Wt Percent from Inlet/Fuel Gas Mole Percent

	Mol Wt	*Fuel Gas Mol %*	*Mol Wt * Mol %*	*Wt %*		*Wt % HC*
N2	28.01	0.972	0.27	1.56		
CO2	44.01	2.626	1.16	6.64		
H2S	34.08	0	0.00	0.00		
C1	16.04	93.274	14.96	85.94		93.61
C2	30.07	2.731	0.82	4.72		5.14
C3	44.1	0.28	0.12	0.71		0.77
iC4	58.12	0.039	0.02	0.13		0.14
nC4	58.12	0.04	0.02	0.13		0.15
iC5	72.15	0.012	0.01	0.05		0.05
nC5	72.15	0.008	0.01	0.03		0.04
C6+	86.18	0.018	0.02	0.09		0.10
		100.00	17.41	100.00		100.00
					Wt% NMHC	6.39
					Wt% NMNEHC (VOC)	**1.25**
					Ratio NENMHC(VOC)/NMHC	**0.20**

2440 Chambers Street, Suite A
Venus, TX 76084
817-539-2168 (O)
817-539-2170 (F)

CERTIFICATE OF ANALYSIS

Number : 2009110054-001A

Chesapeake Energy Marketing, Inc.
Terry Harris
5601 East 1st Street

Fort Worth, Texas 76103

Field:	Tarrant	**Report Date:**	11/13/09
Station:	Ponder Pre Coal. Filter	**Sample Of:**	Spot - Natural Gas
Location:	None	**Sample Date:**	11/10/2009
Sample Point:		**Sample Conditions:**	663 psi ,97° F
Cylinder # :	7514	**PO / Ref. No.:**	

Comments:
h2s 1 ppm

Analytical Data

Components	Mol %	Wt%	GPM at 14.730 psia	Method	Lab Tech.	Date Analyzed
				GPA-2286		11/11/09
N2	0.9720	1.5636		(MC10)		
METHANE	93.2740	85.9231				
CO2	2.6260	6.6365				
ETHANE	2.7310	4.7156	0.7299			
PROPANE	0.2800	0.7092	0.0771			
I-BUTANE	0.0390	0.1304	0.0128			
N-BUTANE	0.0400	0.1332	0.0126			
I-PENTANE	0.0120	0.0500	0.0044			
N-PENTANE	0.0080	0.0333	0.0029			
HEXANES PLUS	0.0180	0.1051	0.0080			
TOTALS	100.0000	100.0000	0.8477			

CALCULATED VALUES	TOTAL	C6+	C7+
MOLECULAR WEIGHT	17.414	101.843	108.216
REAL DRY BTU AT 14.696 PSIA, 60 °F	1006.30	5604.90	5961.20
REAL WET BTU AT 14.696 PSIA, 60 °F	989.70	5508.20	5858.30
RELATIVE DENSITY	0.6023	3.6015	3.8618

	TOTAL	C2+	IC5+
GPM's AT 14.696 PSIA, 60 °F	0.8477	0.8477	0.0153

COMPRESSIBILITY FACTOR 0.9978

Hydrocarbon Laboratory Manager

Compressor Blowdown Calculations
VOC Emissions Quantification - Emission Calculation Page

Company:	**Texas Midstream Gas Services, LLC**
Location:	**Ponder Compressor Station**
County:	**Denton County, TX**
Compressor/Engine:	**Ariel JGE-3 w/ 2-xx", & 1-xx" (or similar) cylinders/Cat 3516 or Wauk 5794**
Compressor Packager:	
Date of Blowdown:	**Updated gas analysis**

4,326.6 scf per blowdown - from Volume Calculations on Page 1.

Component	Analysis (mole%)	Molecular Weight	scf/lb	Emissions (lb/ blowdown)	Emissions tons/blowdown
Nitrogen	0.972%	28.0134	13.565	3.1	0.0016
Carbon Dioxide	2.626%	44.01	8.634	13.2	0.0066
Hydrogen Sulfide	0.000%	34.082	11.150	0.0	0.0000
Methane	93.274%	16.043	23.686	170.4	0.0852
Ethane	2.7310%	30.07	12.637	9.4	0.0047
Propane	0.2800%	44.097	8.617	1.4	0.0007
i-Butane	0.0390%	58.123	6.538	0.3	0.0001
n-Butane	0.0400%	58.123	6.538	0.3	0.0001
i-Pentane	0.0120%	72.15	5.267	0.1	0.0000
n-Pentane	0.0080%	72.15	5.267	0.1	0.0000
Cyclopentane	0.0000%	70.134	5.418	0.0	0.0000
n-Hexane	0.0030%	86.177	4.410	0.0	0.0000
Cyclohexane	0.0000%	84.161	4.515	0.0	0.0000
Other hexanes	0.0021%	100.204	3.792	0.0	0.0000
Heptanes	0.0039%	100.204	3.792	0.0	0.0000
Methylcyclohexane	0.0000%	100.204	3.792	0.0	0.0000
Benzene	0.0008%	78.114	4.865	0.0	0.0000
Toluene	0.0009%	92.141	4.124	0.0	0.0000
Ethylbenzene	0.0001%	106.167	3.579	0.0	0.0000
Xylenes	0.0006%	106.167	3.579	0.0	0.0000
C8+ Heavies	0.0055%	120	3.167	0.1	0.0000
Total All Components	100.00%				
		TOTAL VOC:		**2.29**	**0.0011**
		TOTAL HAPs:		**0.05**	**0.0000**

Compressor Blowdown Calculations
VOC Emissions Quantification - Inputs and Volume Calculation Page

Company:	Texas Midstream Gas Services, LLC
Location:	Ponder Compressor Station
County:	Denton County, TX
Compressor/Engine:	Ariel JGE-3 w/ 2-xx", & 1-xx" (or similar) cylinders/Cat 3516 or Wauk 5794
Compressor Packager:	
No. of Units:	
Unit Numbers:	
Date of Blowdown:	Updated gas analysis

Assumptions - NOTE: Inputs in RED, calculated values in BLUE.

		Purge Gas	
380	scf/lb-mol	1	Valve Orifice (in)
14.7	Standard Pressure (psia)	5	Pressure Behind Valve (psi)
60	Standard Temperature = Gas Temperature (°F)	2	Duration (minutes)
	Used Equation: P1V1/Z1 = P2V2/Z2		

Gas Analysis

Component	Analysis (mole %)
Nitrogen	0.972%
Carbon Dioxide	2.626%
Hydrogen Sulfide	0.000%
Methane	93.274%
Ethane	2.7310%
Propane	0.2800%
i-Butane	0.0390%
n-Butane	0.0400%
i-Pentane	0.0120%
n-Pentane	0.0080%
Cyclopentane	0.0000%
n-Hexane	0.0030%
Cyclohexane	0.0000%
Other Hexanes	0.0021%
Heptanes	0.0039%
Methylcyclohexane	0.0000%
Benzene	0.0008%
Toluene	0.0009%
Ethylbenzene	0.0001%
Xylenes	0.0006%
C8+ Heavies	0.0055%
Total All Components	100.00%

Piping & Vessel Volume Inputs and Calculations

Piping Components	Dia. (inch)	Length (feet)	Pressure (psia)	acf	scf
Package Suction	8	16	350	5.6	140.3
1st Stage Suction	8	2	350	0.7	17.5
1st Stage Discharge	6	24	775	4.7	280.4
Second Stage Suction	6	48	775	9.4	560.7
Second Stage Discharge	4.5	24	1200	2.6	262.4
Package Discharge	4.5	20	1200	2.2	180.6

Vessel Components	Dia. (inch)	Length (inch)	Pressure (psia)	acf	scf
Suction Scrubber	30	72	350	29.4	740.0
1st Stg Suction Puls. Bottle	18	72	350	10.6	266.4
1st Stg Discharge Puls. Bottle	14	72	775	6.4	381.6
2nd Stage Scrubber	22	72	775	15.8	942.3
2nd Stg Suction Puls. Bottle	12	24	775	1.6	93.5
2nd Stg Discharge Puls. Bottle	10	32	1200	1.5	144.0

Cylinder Components	Bore (inch)	Stroke (inch)	# Cyl.	Pressure (psia)	acf	scf
First Stage	15.75	4.5	2	562.5	1.0	43.8
Second Stage	9.75	4.5	1	987.5	0.2	15.8

Cooler Components	Dia. (inch)	Length (feet)	# Tubes	Pressure (psia)	acf	scf
First Stage	1.375	17	46	775	0.7	40.0
Second Stage	1.38	17	35	1200	0.5	50.6

Purge Gas Volume

Q (Mcf/hr) = D(in)^2*P1(psi) (Page 278 of fourth edition of Pipeline Rules of Thumb Handbook)

scf = 166.7

TOTAL SCF: 4326.6

CERTIFICATE OF ANALYSIS

Number : **2009110054-001A**

2440 Chambers Street, Suite A
Venus, TX 76084
817-539-2168 (O)
817-539-2170 (F)

Chesapeake Energy Marketing, Inc.
Terry Harris
5601 East 1st Street

Fort Worth, Texas 76103

Field:	Tarrant	**Report Date:**	11/13/09
Station:	Ponder Pre Coal. Filter	**Sample Of:**	Spot - Natural Gas
Location:	None	**Sample Date:**	11/10/2009
Sample Point:		**Sample Conditions:**	663 psi ,97° F
Cylinder # :	7514	**PO / Ref. No.:**	

Comments:
h2s 1 ppm

Analytical Data

Components	Mol %	Wt%	GPM at 14.73 psia	Method	Lab Tech.	Date Analyzed
				GPA-2286		11/11/09
N2	0.9720	1.5636		(MC10)		
CO2	2.6260	6.6365				
METHANE	93.2740	85.9231				
ETHANE	2.7310	4.7156	0.7299			
PROPANE	0.2800	0.7092	0.0771			
I-BUTANE	0.0390	0.1304	0.0128			
N-BUTANE	0.0400	0.1332	0.0126			
I-PENTANE	0.0120	0.0500	0.0044			
N-PENTANE	0.0080	0.0333	0.0029			
I-HEXANES	0.0021	0.0101	0.0008			
N-HEXANE	0.0030	0.0140	0.0012			
BENZENE	0.0008	0.0037	0.0002			
CYCLOHEXANE	0.0011	0.0052	0.0004			
I-HEPTANES	0.0028	0.0154	0.0012			
N-HEPTANE	0.0011	0.0062	0.0005			
TOLUENE	0.0009	0.0047	0.0003			
I-OCTANES	0.0016	0.0098	0.0008			
N-OCTANE	0.0004	0.0028	0.0002			
*E-BENZENE	0.0001	0.0003	0.0000			
*m,o,&p-XYLENE	0.0006	0.0033	0.0002			
I-NONANES	0.0010	0.0073	0.0005			
N-NONANE	0.0001	0.0010	0.0001			
I-DECANES	0.0004	0.0030	0.0002			
N-DECANE	0.0001	0.0008	0.0001			
I-UNDECANES +	0.0019	0.0175	0.0013			
TOTALS	100.0000	100.0000	0.8477			

Hydrocarbon Laboratory Manager

Add Emission Unit Forms (None)

Chesapeake ENERGY

Regulatory Department

April 6, 2010

VIA CERTIFIED MAIL # 7009 0960 0001 1891 8191

Emission Inventory Data, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Texas Midstream Gas Services, LLC
Emissions Inventory Account No. JHA001A
Ponder Compressor Station - RN105354062

Dear Sir or Madam:

Texas Midstream Gas Services, LLC (TMGS) hereby resubmits the 2009 Emissions Inventory for the referenced compressor station. The 2009 Emissions Inventory was originally submitted March 25, 2010 without the signature of the legally responsible party.

If you have any questions, please contact me at (405) 935-6113 or by email at hillary.moseley@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
EHS Coordinator
Chesapeake Energy

Enclosure: 2009 Emission Inventory

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

Ponder, TX

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Emission Inventory Data, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (*Printed Name*)

C. Date of Delivery

D. Is delivery address different from item 1?
If YES, enter delivery address below:
☐ Yes
☒ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7009 0960 0001 1891 8191

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

ACCOUNT INFORMATION
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2009

Last EI Date:12/31/2008

Emissions Events Certification

Pursuant to Texas Health and Safety Code 382.0215(f). I do hereby certify that 'NO Emissions Events' were experienced at this account during the Emissions Inventory Reporting Calendar year.
(Sign here if and only if you reported no emissions from emission events.)

Signature

Signature of Legally Responsible Party

I do hereby certify that information reported in this inventory is true, accurate, and fully represents the emissions that occurred during the Emissions Inventory Reporting Calendar year to the best of my knowledge.

Signature

Chief Operating Officer
Title

405-935-2757
Phone

Robert S. Purgason
Printed Name

April 6, 2010
Date

405-849-2757
Fax

Chesapeake ENERGY

Regulatory Department

March 29, 2011

VIA CERTIFIED MAIL # 7010 1870 0001 4590 9101

Emission Inventory Data, MC 166
Texas Conservation on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Texas Midstream Gas Services, LLC
Emissions Inventory Account No. DFA173Q
Ponder Compressor Station - RN105354062

Dear Sir or Madam:

Texas Midstream Gas Services, LLC (TMGS) hereby submits the 2010 Emissions Inventory for the referenced compressor station.

If you have any questions, please contact me at (405) 935-6113 or by email at CMAirGroup@chk.com.

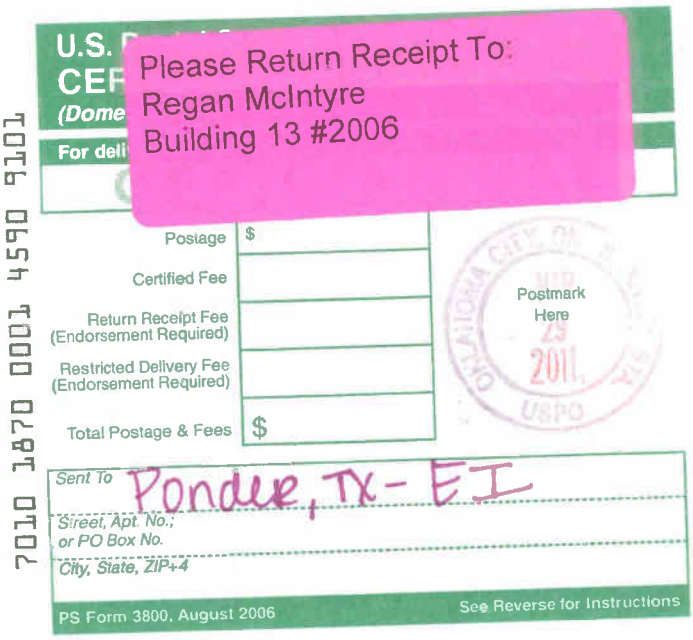
Sincerely,

Hillary Moseley

Hillary Moseley
Corporate Air Specialist – Midstream
Chesapeake Energy

Enclosure: 2010 Emissions Inventory

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.879.7908



U.S. [illegible]
CER
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For deli

Please Return Receipt To:
Regan McIntyre
Building 13 #2006

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here
23 2011
USPO

7010 1870 0001 4590 9101

Sent To Ponder, TX - EI
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Ponder, TX - EI

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Emissions Inventory Data, MC 166
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

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2. Article Number *(Transfer from service label)* 7010 1870 0001 4590 9101

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

2010 EMISSION INVENTORY
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Texas Midstream Gas Services LLC
Ponder Compressor Station

Prepared For:

Texas Midstream Gas Services LLC
6100 N. Western Avenue
Oklahoma City, OK 73118

Prepared by:

Flatrock Engineering and Environmental, Ltd.
9341 E. Lake Highlands Dr.
Dallas, Texas 75218

March, 2011

2010 TCEQ Emissions Inventory Questionnaire

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
EIQ REPORT

RN: RN105354062
ACCOUNT: DFA173Q
COMPANY: TEXAS MIDSTREAM GAS SERVICES LLC
DATE - Dec. 03, 2010

ACCOUNT INFORMATION
EIQ Year:2010
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC
Last EI Date:12/31/2009
Company is Owner/Operator:BOTH Site Independently Owned (Y/N):___ No. of Employees:0
Site Name:PONDER COMPRESSOR STATION
Primary SIC:1311-CRUDE PETROLEUM & NATURAL GAS
Secondary SIC:0 -<NONE>
Location:3.5 M S OF PONDER ON HWY 156
Near City:PONDER County:DENTON Region:4
UTM Zone:14
Latitude: 330737.0000
UTM North Meters:3666650.762
Longtitude: 971749.00
UTM East Meters: 658873.633
Site Status:O Oper Schedule: 24 hr/day, 7 da/wk, 52 wk/yr Tot Oper Hrs:8760
Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

EMISSIONS INVENTORY CONTACT INFORMATION
Name: ~~JOHNSON, BRANDI~~ Hillary Moseley Title: ~~EHS SPECIALIST~~ Corporate Air Specialist-Midstream
Mailing Address:PO BOX 18496
City:OKLAHOMA CITY State:OK Zip Code:73154-
Bus Phone:(405) 935-~~4882X~~ 6113 Fax:(405) 849-~~4882~~ 6113 Email: ~~BRANDI.JOHNSON@CHK.COM~~ CMAirgroup@chk.com

PLANT CONTACT INFORMATION
Name:ALDER, DENNIS Title:EHS FIELD COORD
Mailing Address:5601 E 1ST ST
City:FORT WORTH State:TX Zip Code:76052-
Bus Phone:(817) 239-3990X Fax:(801) 340-4696 Email:DENNIS.ALDER@CHK.COM

ACCOUNT INFORMATION
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

Last EI Date:12/31/2009

CRITERIA EMISSIONS TOTALS

Class	Annual (TPY)/Current	Ozone (PPD)/Current	SMSS (TPY)/Current	EE (TPY)/Current	EE/SMSS(TPY)
PM10	2.3200/ 2.151	12.7120/ 11.786	0.0000/	0.0000/	0.0000
PB	0.0000/	0.0000/	0.0000/	0.0000/	0.0000
SO2	0.2700/ 0.094	1.4795/ 0.515	0.0000/	0.0000/	0.0000
NOX	34.1800/ 21.648	187.2900/ 118.62	0.0000/	0.0000/	0.0000
CO	27.6100/ 29.761	151.2880/ 163.07	0.0000/	0.0000/	0.0000
VOC	7.0400/ 4.056	38.5695/ 26.08	0.0000/ 0.11	0.0000/	0.0000 0.11
PM2.5	2.3200/ 2.151	12.7120/ 11.786	0.0000/	0.0000/	0.0000

SITE QUANTIFIABLE EVENT TOTALS

Note:
Report TOTAL NUMBER of each event type for the reported EIQ Year per 30 TAC Sections 101.201 and 101.211.

Reportable Emission Events: 0
Non-Reportable Emission Events: 0
Reportable Scheduled Maintenance, Startup, or Shutdown Activities: 0
Non-Reportable Scheduled Maintenance, Startup, or Shutdown Activities: 96
Excess Opacity Events: 0

ACCOUNT INFORMATION
RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

Last EI Date:12/31/2009

Emissions Events Certification

Pursuant to Texas Health and Safety Code 382.0215(f). I do hereby certify that 'NO Emissions Events' were experienced at this account during the Emissions Inventory Reporting Calendar year.
(Sign here if and only if you reported no emissions from emission events.)

Signature _____

Signature of Legally Responsible Party

I do hereby certify that information reported in this inventory is true, accurate, and fully represents the emissions that occurred during the Emissions Inventory Reporting Calendar year to the best of my knowledge.

_____
Signature

COO, Chesapeake Midstream Partners
Title

405-935-2757
Phone

Bob Ruegason
Printed Name

3/28/11
Date

405-849-2757
Fax

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2010

FIN:FUG EPN:FUG
Comment:

FACILITY INFORMATION

FIN:FUG Facility Name:SITE FUGITIVES Plant ID:

Comment:

SCC:31000220 Description:OIL & GAS PRODUCTNATURAL GAS PRODUALL EQUIPMENT
Status:A Status Date:05/03/2008 Operating Schedule:24 ___hrs/day,7 ___days/wk,52 ___wks/yr
Annual Operating Hours:0 Percentage Max Capacity:0 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:EQUIPLKFUG

Profile:EQUIPMENT LEAK FUGITIVES

Characteristic	Value	Unit	Characteristic	Value	Unit
% VOC IN GAS/VAP	5	%	% VOC IN LT LIQUID	-----	----
CALCULATION METHOD	OIL&GAS	----	CNCTR MONITORNG PRGM	-----	----
LDAR PROG IN USE Y/N	NO	----	LDAR PROG SPECIFIED	-----	----
LDAR PROGRAM REASON	-----	----	SCRN VALUE MAX	-----	----
SCRN VALUE MIN	-----	----	SCRN VALUE PEG COMPS	-----	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:FUG EPN:FUG
Comment:

EMISSION POINT INFORMATION

EPN:FUG Point Name:SITE FUGITIVES

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:FUGITIVE

Characteristic	Value	Unit
DEGREES	0	DEGREES
HEIGHT	5	FEET
LENGTH	200	FEET
OFNORTH	-----	----
WIDTH	200	FEET

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: _____ MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
50001	0	VOC-UNCLASSIFIED	A	0.0600	0.3288	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:FUG EPN:FUG
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2010

FIN:G1 EPN:G1
Comment:

FACILITY INFORMATION

FIN:G1 Facility Name:DIESEL GENERATOR (BACKUP) Plant ID:

Comment:

SCC:20100102 Description:ELECTRIC GENERATNDIST.OIL/DIESEL RECIPROCATING
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours:~~715~~ 0 Percentage Max Capacity:~~8~~ 0 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	-----	----	CYCLE	-----	----
ENGINE RATING	250	HP	FIRING TYPE	-----	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:G1 EPN:G1
Comment:

EMISSION POINT INFORMATION

EPN:G1 Point Name:DIESEL GENERATOR STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	0.25	FEET
HEIGHT	10	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	1000	DEG F
VELOCITY	48	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 0 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC EIQ Year:2010

FIN:G1 EPN:G1
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	~~0.2000~~ 0	1.0960	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	~~0.2000~~ 0	1.0960	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	~~0.2000~~ 0	1.0960	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	A	~~0.2200~~ 0	1.2050	0.0000	0.0000	0.0000
51680	50000	FORMALDEHYDE	A	~~0.1100~~ 0	0.6027	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	A	~~2.7700~~ 0	15.1800	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	A	~~0.1800~~ 0	0.9863	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	A	~~0.6000~~ 0	3.2880	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC EIQ Year: 2010

FIN:MC1973 EPN:MC1973
Comment:

FACILITY INFORMATION

FIN:MC1973 Facility Name:WAUKESHA L5794 GSI Plant ID:

Comment:

SCC:20200253 Description:INDUSTRIAL NATURAL GAS 4-CYCLE RICH BURN
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours: ~~8335~~ 8421 Percentage Max Capacity: ~~95~~ 96 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	RICH	----	CYCLE	4	CYCLE
ENGINE RATING	1380	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1973 EPN:MC1973
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC1973 Name:NSCR FOR MC1973

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~8335~~ 8421 % Time Off Line: 0 IM Schedule:Q

Control Efficiencies:

VOC:	60.00% 60%	NOX:	~~96.50%~~ 96.50%	CO:	90.00% 90%	IOC:	0.00%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%	C1-C3:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%		

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1973 EPN:MC1973
Comment:

EMISSION POINT INFORMATION

EPN:MC1973 Point Name:WAUKESHA L5794 GSI STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.17	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	0	%
TEMP	1135	DEG F
VELOCITY	99	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 87,157 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1973 EPN:MC1973
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	~~0.8400~~ 0.85	~~4.6030~~ 4.658	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	~~0.8400~~ 0.85	~~4.6030~~ 4.658	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	~~0.8400~~ 0.85	~~4.6030~~ 4.658	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	~~1.3700~~ 1.38	~~7.5070~~ 7.5624	0.0000 0.0321	0.0000	0.0000 0.0321
70400	0	NITROGEN OXIDES	V	~~6.1700~~ 6.23	~~33.8100~~ 34.1404	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	~~0.0300~~ 0.03	~~0.1644~~ 0.1644	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	~~11.0300~~ 11.14	~~60.4400~~ 61.0472	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2010

FIN:MC1989 EPN:MC1989
Comment:

FACILITY INFORMATION

FIN:MC1989 Facility Name:CATERPILLAR G3516LE Plant ID:

Comment: Operating parameters changed for 2010 to lower NOx emissions

SCC:20200256 Description:INDUSTRIAL NATURAL GAS 4-CYCLE CLEAN BUR
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours ~~8571~~ 5299 Percentage Max Capacity:~~98~~ 60 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	LEAN	----	CYCLE	4	CYCLE
ENGINE RATING	1340	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1989 EPN:MC1989
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC1989 Name:OXIDATION CATALYST FOR MC1989

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~8444~~ 5299 % Time Off Line: 0 IM Schedule:

Control Efficiencies:

VOC:	50.00% 50%	NOX:	0.00%	CO:	~~80.00%~~ 80%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%

IOC:	0.00%
C1-C3:	0.00%

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1989 EPN:MC1989
Comment:

EMISSION POINT INFORMATION

EPN:MC1989 Point Name:CATERPILLAR G3516 LE STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.0	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	855	DEG F
VELOCITY	127	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 53,582 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX	0.70	grams/hp-hr	
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC1989 EPN:MC1989
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	~~0.4300~~ 0.2700	~~2.3560~~ 1.4796	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	~~0.4300~~ 0.2700	~~2.3560~~ 1.4796	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	~~0.4300~~ 0.2700	~~2.3560~~ 1.4796	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	~~2.9100~~ 1.2100	~~15.9400~~ 6.6308	0.0000 0.0321	0.0000	0.0000 0.0321
51680	50000	FORMALDEHYDE	V	~~0.7900~~ 0.2900	~~4.3290~~ 1.5892	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	V	~~18.9900~~ 5.4800	~~104.0000~~ 30.0304	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	~~0.0300~~ 0.0200	~~0.1644~~ 0.1096	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	~~3100~~ 4.3800	~~26.3600~~ 24.0024	0.0000	0.0000	0.0000

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year: 2010

FIN:MC2209 EPN:MC2209
Comment:

FACILITY INFORMATION

FIN:MC2209 Facility Name:WAUKESHA L5794 GSI Plant ID:

Comment:

SCC:20200253 Description:INDUSTRIAL NATURAL GAS 4-CYCLE RICH BURN
Status:A Status Date:05/03/2008 Operating Schedule:24 hrs/day,7 days/wk,52 wks/yr
Annual Operating Hours: ~~8444~~ 8592 Percentage Max Capacity: ~~96~~ 98 Start Time:800

Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 25% Summer: 25% Fall: 25% Winter: 25%

Group Type:COMBUSTN

Profile:I.C. ENGINE

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	RICH	----	CYCLE	4	CYCLE
ENGINE RATING	1380	HP	FIRING TYPE	IN	----

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC2209 EPN:MC2209
Comment:

CONTROL DEVICE INFORMATION

---

*CIN:CCMC2209 Name:NSCR FOR MC2209

Abatement Code: 631 Desc: CATALYTIC REDUCTION
No. Of Units: 1 Annual Operating Hrs: ~~5711~~ 8592 % Time Off Line: 65 IM Schedule:Q

Control Efficiencies:

VOC:	~~90.00%~~ 90%	NOX:	~~96.50%~~ 96.5%	CO:	~~90.00%~~ 90%	IOC:	0.00%
TSP:	0.00%	PM10:	0.00%	SO2:	0.00%	C1-C3:	0.00%
C4+:	0.00%	H2S:	0.00%	NH3:	0.00%		

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC EIQ Year:2010

FIN:MC2209 EPN:MC2209
Comment:

EMISSION POINT INFORMATION

EPN:MC2209 Point Name:WAUKESHA L5794 GSI STACK

UTM Zone:14
UTM North Meters: 3666640.000
UTM East Meters: 658870.000

Latitude: 330736.6500
Longitude: 971749.1400

Profile:STACK

Characteristic	Value	Unit
DIAMETER	1.17	FEET
HEIGHT	22	FEET
HORDSCHG	N	----
MOISTURE	-----	----
TEMP	1135	DEG F
VELOCITY	99	FT/SEC

EMISSIONS FACTORS

Total Annual Aggregate Heat Input: 88,927 MMBTU (Combustion Units Only)

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC			
NOX			
CO			
SO2			
TSP			

RN:RN105354062 Account:DFA173Q
Company:TEXAS MIDSTREAM GAS SERVICES LLC

EIQ Year:2010

FIN:MC2209 EPN:MC2209
Comment:

EMISSIONS INFORMATION

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	~~0.8500~~ 0.27	~~4.6570~~ 1.4796	0.0000	0.0000	0.0000
20000	0	PM10 PART-U	A	~~0.8500~~ 0.27	~~4.6570~~ 1.4796	0.0000	0.0000	0.0000
39999	0	TOTAL PM2.5 PARTICULATE	A	~~0.8500~~ 0.27	~~4.6570~~ 1.4796	0.0000	0.0000	0.0000
50001	0	VOC-UNCLASSIFIED	V	~~1.3900~~ 1.80	~~7.6160~~ 9.8640	0.0000 0.0453	0.0000	0.0000 0.0458
51680	50000	FORMALDEHYDE	V	~~0.1900~~ 0.49	~~1.0410~~ 2.6852	0.0000	0.0000	0.0000
70400	0	NITROGEN OXIDES	V	~~6.2500~~ 6.36	~~34.2500~~ 34.8528	0.0000	0.0000	0.0000
70510	7446095	SULFUR DIOXIDE	E	~~0.0300~~ 0.02	~~0.1644~~ 0.1096	0.0000	0.0000	0.0000
90300	630080	CARBON MONOXIDE	V	~~11.1700~~ 11.37	~~61.2000~~ 62.3076	0.0000	0.0000	0.0000

Emission Calculations

CRITERIA EMISSIONS SUMMARY - 2010 EIQ

Owner/Operator: Texas Midstream Gas Services, LLC
Facility: Ponder Compressor Station

Facility Name	Facility ID # (FIN)	Facility ID # (EPN)	2010 NOx Emissions		2010 CO Emissions		2010 VOC emissions		2010 PM Emissions		2010 SO2 Emissions	
			Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr
Compressor 1 (5794)	MC1973	MC1973	6.23	1.48	11.14	2.65	1.38	0.33	0.85	0.20	0.03	0.01
Compressor 2 (5794)	MC2209	MC2209	6.36	1.48	11.37	2.65	1.41	0.33	0.86	0.20	0.03	0.01
Compressor 3 (3516)	MC1989	MC1989	9.06	2.07	7.25	1.65	2.01	0.46	0.44	0.10	0.03	0.01
Generator Engine 1 (Backup)	G1	G1	0.00	7.75	0.00	1.67	0.00	0.62	0.00	0.55	0.00	0.51
Site Fugitives	FUG	FUG	NA	NA	NA	NA	0.06	0.01	NA	NA	NA	NA
		SUBTOTALS:	**21.648**	**12.778**	**29.761**	**8.618**	**4.856**	**1.745**	**2.151**	**1.053**	**0.094**	**0.534**
		# Blowdowns										
MSS Emissions[1]	MC1973	28	NA	NA	NA	NA	0.0321	2.29	NA	NA	NA	NA
	MC2209	40	NA	NA	NA	NA	0.0458	2.29	NA	NA	NA	NA
	MC1989	28	NA	NA	NA	NA	0.0321	2.29	NA	NA	NA	NA
		SUBTOTALS:	**0.000**	**0.000**	**0.000**	**0.000**	**0.110**	**6.870**	**0.000**	**0.000**	**0.000**	**0.000**
		TOTALS:	**21.648**	**12.778**	**29.761**	**8.618**	**4.966**	**8.615**	**2.151**	**1.053**	**0.094**	**0.534**

[1] MSS Blowdown Calculation: 2.29 lbs VOC/MSS blowdown. Example Calc: MC1973, 28 blowdowns x 2.29 lbs/blowdown / 2000 lbs/ton = 0.032 tons VOC for 2010.

Facility: Ponder Compressor S
Facility Name: Compressor 1 (5794)
Compressor 2 (5794)

FIN: MC1973
MC2209

EPN: MC1973
MC2209

CIN: CCMC1973
CCMC2209

EMISSION CALCULATIONS:

Methodology: Emission factors are from manufacturer's data (attached).

NMHC factor (0.27 and 0.46 g/hp-hr respectively) used as VOC factor for safety.

Typical oxidative catalytic converter reductions taken below for Caterpillar G3516 LE (C3). Oxidative catalyst specifications can be provided upon request.

EPN:	MC1973 Compressor 1 (5794)	MC2209 Compressor 2 (5794)
Engine Model:	Wauk 5794	Wauk 5794
Rated Horsepower:	1,380	1,380
Max Annual Runtime (hrs/year):	8,760	8,760
2010 Runtime (hrs/year):	**8,421**	**8,592**
Ozone Operating Schedule (hr/day):	24	24
BTU/scf:	1,000	1,000
BTU/hp-hr:	7,500	7,500
Fuel Used (MMBTU/hr):	10.350	10.350
Fuel Used (Mscf/hr):	10.35	10.35
Fuel Used (MMscf/yr):	87.157	88.927
2010 Fuel Used (MMBtu/yr):	**87,157**	**88,927**

EPN	Pollutant	Emission Factors (g/hp-hr) or *(lb/MMBTU) or (gr S/100 scf)*	Pre Converter lb/hr	Pre Converter tpy	Post Converter/ PTE lb/hr	Post Converter/ PTE tpy	2010 Emissions lb/hr	2010 Emissions tpy	Converter Reductions	Catalytic Converter Methodology		Post-Conv g/hp-hr
MC1973	NOx	13.9	42.29	178.06	1.48	6.48	1.48	**6.23**	96.50%			0.487
	CO	8.7	26.47	111.44	2.65	11.59	2.65	**11.14**	90.00%			0.870
	VOC	0.27	0.82	3.46	0.33	1.44	0.33	**1.38**	60.00%			0.108
	Formaldehyde	0.05	0.15	0.64	0.05	0.20	0.05	**0.19**	70.00%			0.015
	PM	*0.01941*	0.20	0.85	0.20	0.88	0.20	**0.85**	NA			NA
	SO2	***0.25***	0.0074	0.03	0.01	0.03	0.01	**0.03**	NA			NA
MC2209	NOx	13.9	42.29	181.67	1.48	6.48	1.48	**6.36**	96.50%			0.487
	CO	8.7	26.47	113.71	2.65	11.59	2.65	**11.37**	90.00%			0.870
	VOC	0.27	0.82	3.53	0.33	1.44	0.33	**1.41**	60.00%			0.108
	Formaldehyde	0.05	0.15	0.65	0.05	0.20	0.05	**0.20**	70.00%			0.015
	PM	*0.01941*	0.20	0.86	0.20	0.88	0.20	**0.86**	NA			NA
	SO2	***0.25***	0.01	0.03	0.01	0.03	0.01	**0.03**	NA			NA
TOTALS:	NOx		84.58	359.73	2.96	12.97	2.96	12.59				
	CO		52.94	225.15	5.29	23.19	5.29	22.52				
	VOC		1.64	6.99	0.66	2.88	0.66	2.79				
	Formaldehyde		0.30	1.29	0.09	0.40	0.09	0.39				
	PM		0.40	1.71	0.40	1.76	0.40	1.71				
	SO2		0.01	0.06	0.01	0.06	0.01	0.06				

Facility: Ponder Compressor Station
Group:
Facility Name: Compressor 3 (3516)

FIN/EPN: C3

New FIN/EPN MC1989

EMISSION CALCULATIONS:

Methodology: Operating parameter adjustments to lower NOx emission factor to 0.7 g/hp-hr have been made to show compliance with DFW Eight-Hour Chapter 117 requiements. Please see oxidative catalytic converter quote for MC1989 Caterpillar 3516 reductions. CO factor raised for safety.

1340 hp Caterpillar 3615 pre-converter VOC and formaldehyde factors from manufacturers data.

PM emissions factors from AP-42. SO2 emissions are based on a maximum fuel sulfur content of 0.25 gr/100 scf (4 ppm H2S).

	Compressor 3 (3516)
Engine Model:	G3516LE
Rated Horsepower:	1,340
Maximum runtime (hrs/year):	8,760
2010 Runtime (hrs/year):	**5,299**
Ozone Operating Schedule (hr/day):	24
BTU/scf:	1,000
BTU/hp-hr:	7,545
Fuel Used (MMBTU/hr):	10.110
Fuel Used (Mscf/hr):	10.11
Fuel Used (MMscf/day):	0.243
2010 Fuel Used (MMBtu/yr):	**53,574**

EPN	Pollutant	Emission Factors (g/hp-hr) or *(lb/MMBTU) or (gr S/100 scf)*	PTE		Post Converter/Certification		Converter Reductions	Catalytic Converter Methodology		Post-Conv g/hp-hr
			lb/hr	tpy	lb/hr	tpy				
Compressor 3 (3516)	NOx	0.7	2.07	9.06	2.07	**5.48**	NA			NA
	CO	2.8	8.27	36.23	1.65	**4.38**	80.00%			0.560
	VOC	0.31	0.92	4.01	0.46	**1.21**	50.00%			0.155
	PM	*9.99E-03*	0.10	0.44	0.10	**0.27**	0.00%			NA
	SO2	***0.25***	0.0072	0.03	0.01	**0.02**	0.00%			NA
	Formaldehyde	0.25	0.74	3.23	0.11	**0.29**	85.00%			0.038

Facility: Ponder Compressor Station
Facility Name: Generator Engine 1 (Backup)

FIN: G1
EPN: G1

EMISSION CALCULATIONS:

Methodology: Emission factors are from AP-42, Table 3.3-1 and Table 3.3-2 (Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, Version 10/96).

EPN:

	G1 Generator Engine 1 (Backup)
	Diesel Generator Engine
Rated Horsepower:	250
2010 runtime (hrs/year):	0
Ozone Operating Schedule (hr/day):	24
BTU/lb:	19,300
BTU/hp-hr:	7,000
Fuel Used (MMBTU/hr):	1.750
Fuel Used (Mlbs/hr):	0.09
Fuel Used (MMlbs/yr):	0.000
Fuel Used (MMBtu/yr):	**0**

EPN	Pollutant	Emission Factors (lb/hp-hr)	2010 lb/hr	2010 tpy	Converter Reductions	Catalytic Converter Methodology		Post-Conv g/hp-hr
G1	NOx	0.0310	7.75	0.00	NA			NA
	CO	0.00668	1.67	0.00	NA			NA
	VOC	0.00247	0.62	0.00	NA			NA
	Formaldehyde	0.00118	0.30	0.00	NA			NA
	PM	0.0022	0.55	0.00	NA			NA
	SO2	0.0021	0.51	0.00	NA			NA

Facility: Ponder Compressor Station
Emission Unit: Site Fugitives
Stack ID(s): FUG

Methodology

Emission factors are taken from a TNRCC internal memo dated January 3, 1996. Subject: Equipment Leak Factors for Oil and Gas Production Operations. Factors based on data collected by API. Stream VOC Wt% equals 1.25 from inlet gas analysis.

Calculations

SOURCE	FACTOR	STREAM	COUNT	REDUCT'S	SOURCE	TONS/YR
API	0.00992	1.25%	67	0.0%	SYSTEM VALVES	0.04
API	0.01940	1.25%	8	0.0%	RELIEF VALVES	0.01
API	0.00441	1.25%	0	0.0%	OPEN ENDED LINES	0.00
API	0.01940	1.25%	3	0.0%	COMPRESSOR SEALS	0.00
API	0.00044	1.25%	300	0.0%	CONNECTIONS	0.01
					TOTAL	**0.06**

Chesapeake Energy Marketing, Inc.
Ponder Compressor Station

VOC Wt Percent from Inlet/Fuel Gas Mole Percent

	Mol Wt	*Fuel Gas Mol %*	*Mol Wt * Mol %*	*Wt %*		*Wt % HC*
N2	28.01	0.972	0.27	1.56		
CO2	44.01	2.626	1.16	6.64		
H2S	34.08	0	0.00	0.00		
C1	16.04	93.274	14.96	85.94		93.61
C2	30.07	2.731	0.82	4.72		5.14
C3	44.1	0.28	0.12	0.71		0.77
iC4	58.12	0.039	0.02	0.13		0.14
nC4	58.12	0.04	0.02	0.13		0.15
iC5	72.15	0.012	0.01	0.05		0.05
nC5	72.15	0.008	0.01	0.03		0.04
C6+	86.18	0.018	0.02	0.09		0.10
		100.00	17.41	100.00		100.00
					Wt% NMHC	6.39
					Wt% NMNEHC (VOC)	**1.25**
					Ratio NENMHC(VOC)/NMHC	**0.20**

This is the last page of report

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Coordination Branch
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Chesapeake ENERGY

Regulatory Department

July 6, 2010

VIA CERTIFIED MAIL # 7009 0960 0000 6543 7578

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

Re: NSPS Subpart JJJJ Performance Test Results
Arkansas Midstream Gas Services (AMGS)
Harmony Compressor Station – AFIN 73-00787

To Whom It May Concern:

Per 40 C.F.R. § 60.8(a), AMGS is submitting the results of performance testing for one affected facility as defined by NSPS Subpart JJJJ (MC2427). The test was conducted on June 6, 2010. If you have any questions, please contact me at (405) 935-6113 or by email at CMairgroup@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
EHS Coordinator
Chesapeake Energy

cc: Arkansas Department of Environmental Quality
Air Division, Enforcement Branch via email

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

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Coordination Branch
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MidCon COMPRESSION

EMISSIONS TEST REPORT

Summary of Testing Performed On:

Waukesha L5794GSI Compressor Engine
Unit Number MC2427 (S/N C-17316/1)

located at the

Harmony Compressor Station
for
Arkansas Midstream Gas Services

June 10, 2010

MidCon Project Number: MCET105006

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This Emissions Test Report has been reviewed for completeness and accuracy and has been determined to be an accurate and true representation of the actual emissions generated during the testing event.

James Mode

Digitally signed by James Mode
DN: dc=net, dc=chkenergy, ou=Users and Groups, cn=James Mode, email=James.Mode@chk.com
Date: 2010.07.01 14:28:01 -05'00'

James Mode, QSTI
Environmental Health & Safety Specialist
MidCon Compression

Steve Childress
EH&S Specialist
Chesapeake Energy Corp

INTRODUCTION

MidCon Compression LLC Emissions Testing department conducted source emissions testing for Arkansas Midstream Gas Services on one natural gas fired engine, Unit Number MC2427, located at the Harmony Compressor Station in White County, Arkansas. This engine is equipped with the following control equipment: NSCR. The purpose of this test was to determine the emissions of oxides of nitrogen (NOx), carbon monoxide (CO), and non-methane hydrocarbons (NMHC) being emitted to the atmosphere via the engine exhaust stack. The test of MC2427 fulfills the performance test requirements of Title 40 of the Code of Federal Regulations, Part 60 (40CFR60), Subpart JJJJ and permit 1868-AGP-117.

The results of this testing, performed on June 10, 2010, show that the engine is in compliance with the specified regulations.

Mr. Steve Bornsen with MidCon Compression performed all testing and generated this report. The sampling followed the procedures set forth in 40CFR60, Appendix A, Methods 1, 3A, 4, 7E, 10, 19, 25A, and 205. Testing was performed while the engine was operated at an average of 1249 bhp @ 1163 rpm, 91% of the engine's rated capacity of 1380 bhp @ 1200 rpm.

SUMMARY OF TEST RESULTS

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1

			Oxides of Nitrogen					Carbon Monoxide					Non Methane Hydrocarbons[2]					Oxygen Conc. (% vol.)	Percent Moisture	Unit Load (bhp)
RUN	DATE	TIME	(dry ppm)	corr. ppm[1]	g/BHP-hr	lbs./hr.	TPY	(dry ppm)	corr. ppm[1]	g/BHP-hr	lbs./hr.	TPY	wet ppm	dry ppm	corr. ppm[1]	lbs./hr.	TPY			
1	6/10/10	8:20 - 9:20	48.65	13.73	0.18	0.53	2.34	191.70	54.12	0.42	1.28	5.61	0.00	0.00	0.00	0.00	0.00	0.00	20.22	1249
2	6/10/10	9:43 - 10:43	40.55	11.45	0.15	0.45	1.98	208.19	58.77	0.46	1.41	6.18	0.00	0.00	0.00	0.00	0.00	0.00	20.51	1249
3	6/10/10	11:03 - 12:03	39.91	11.27	0.14	0.44	1.94	199.13	56.21	0.44	1.35	5.90	0.00	0.00	0.00	0.00	0.00	0.00	19.97	1249
Averages				**12.15**	**0.16**	**0.48**	**2.09**		**56.37**	**0.44**	**1.35**	**5.90**			**0.00**	**0.00**	**0.00**	**0.00**		**1249**
Allowable Emission Rate per 40CFR60 Subpart JJJJ			---	160	2.0	---	---	---	540	4.0	---	---	---	---	86.0	---	---	---	---	---
Allowable Emission Rate per Permit			---	---	0.299	0.9	3.9	---	---	0.609	1.8	7.9	---	---	---	0.2	0.7	---	---	---

O_2 F_d Factor = 8617 dscf*/million Btu

Brake Specific Fuel Consumption = 7719 Btu/HP-hr

Load = 90.51% %[3]

[1] corrected to 15% O_2
[2] as propane
[3] percent of maximum rated horsepower

DISCUSSION OF SAMPLING RESULTS

Oxides of Nitrogen

The three tests for oxides of nitrogen (NO_x) were a valid representation of the actual emissions. Calibration error tests on the oxides of nitrogen analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 1.81% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

A nitrogen dioxide to nitrogen oxide ($NO_2 \rightarrow NO$) conversion efficiency test was performed on the day of testing. The response of the analyzer was stable and confirmed that the allowable conversion efficiency of 90% was met therefore resulting in valid test.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Carbon Monoxide

The three tests for carbon monoxide (CO) were a valid representation of the actual emissions. Calibration error tests on the carbon monoxide analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 0.62% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Non Methane Hydrocarbons

The three tests for Non-methane Hydrocarbons (NMHC) were a valid representation of the actual emissions. Calibration error tests on the NMHC analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 25A, Section 8.4 and showed no results greater than 2.79% compared to the allowable 5.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and

showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests were adjusted to a dry ppm basis utilizing equation 1 from EPA's Air Quality and Planning Standards, Basic Concepts in Environmental Sciences, Module 2.

Oxygen

The three tests for oxygen (O_2) were a valid representation of the actual emissions. Calibration error tests on the oxygen analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 0.15% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Moisture

The three tests for moisture appeared to be a valid representation of the actual emissions. All samples were collected following the procedures set forth in 40CFR60, Appendix A, Method 4.

PROCESS DESCRIPTION

The Harmony Compressor Station is used to boost the pressure of sweet natural gas to a natural gas transportation system. Gas from the inlet separator is compressed by eight compressor engines. Compressor discharge enters the glycol dehydrators before exiting the station.

DESCRIPTION OF SAMPLING LOCATION

The exhaust stack on the L5794GSI Waukesha engine, Unit Number MC2427, located at the Harmony Compressor Station Site is approximately 22 feet above the ground. The sampling was performed at the exhaust of the stack. A schematic of this sampling location is provided in Attachment B.

SAMPLING AND ANALYTICAL PROCEDURES

All testing followed the procedures set forth in 40CFR60, App. A, Methods 1, 3A, 4, 7E, 10, 19, 25A, and 205. The reference method monitors were leak checked at the end of the sampling probe before sampling and again at the conclusion of sampling. Samples of sixty-minute duration were taken from the exhaust stack for each of three test runs.

Oxides of Nitrogen

NO_x sampling was performed following all guidance in EPA Method 7E. A California Analytical Instruments model 600 oxides of nitrogen analyzer (serial number V04057) was used to monitor the concentrations of oxides of nitrogen during each run. The reference method analyzer was operated in the NO_x mode at calibration span of 192.0 ppm. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check and a NO_2 to NO conversion efficiency test were also conducted. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
96.0 ppm Nitric Oxide in Nitrogen
192.0 ppm Nitric Oxide in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located approximately 1.8 diameters from the outlet of the engine exhaust stack.

Carbon Monoxide

CO sampling was performed following all guidance in EPA Method 10. A California Analytical Instruments model 600 carbon monoxide analyzer (serial number V04055-M) was used to monitor the concentrations of carbon monoxide during each run. The reference method analyzer was operated at a calibration span of 466.2 ppm. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check was also performed prior to testing. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
233.1 ppm Carbon Monoxide in Nitrogen
466.2 ppm Carbon Monoxide in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located approximately 1.8 diameters from the outlet of the engine exhaust stack.

Non Methane Hydrocarbons

The gaseous total hydrocarbons and non methane hydrocarbons were performed following all guidance in EPA Method 25A. A continuous sample of the flue gas will be delivered to a California Analytical Instruments model 600 non methane hydrocarbon analyzer (serial number V05071) through a heated sample line (maintained above 230° F). The reference method analyzer was operated at a calibration span of 875 ppm.

This instrument utilizes the principle of Flame Ionization Detection (FID) to determine the total hydrocarbons within a gaseous sample. The MHFID analyzer has a heated oven (191° C) which contains a burner and an optional heated pump. The small flame of the burner is elevated and sustained by the regulated flows of air and a 40/60 mixture of hydrogen and helium. The split ring detector contains 2 electrodes. One electrode is negatively polarized using a precision power supply and the other electrode, known as the "collector" is connected to a high impedance, low noise electronic amplifier. The two electrodes establish an electrostatic field. When a gaseous sample is introduced to the burner, it is ionized in the flame and the electrostatic field causes the charged particles (ions) to migrate to their respective electrodes. The migration creates a small current between the electrodes. This current is measured by the precision electrometer amplifier and is directly proportional to the hydrocarbon concentration of the sample. The methane mode provides for measuring methane only or total hydrocarbons and calculates, displays and outputs the sample's NMHC content. The non methane cutter's catalyst removal efficiency is greater than 98% for ethane and heavier hydrocarbons and better than 90% for methane retention. The current is converted to a voltage output and recorded continuously on the computerized data acquisition system.

This instrument is calibrated using EPA Protocol Number 1, National Institute of Standards and Technology (NIST) concentrations of propane in nitrogen (N_2) and methane in nitrogen (N_2) or oxygen (O_2). A single opening stainless steel probe will be used to collect the sample. The sample gas to the analyzer will pass through an

in-stack filtering system to remove particulate matter. Calibration and linearity checks are performed through the entire sampling system before and after each test period. "Zero drift" checks are made after each run to adjust the concentration bias due to drift. All parts of the sample extraction system are heated to a temperature of at least 230°F, and the analyzer detector is heated to a temperature of at least 250°F. The calibration gases used during all sampling were as follows:

Zero Nitrogen
235.6 ppm Propane in Nitrogen
471.2 ppm Propane in Nitrogen
706.8 ppm Propane in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

Oxygen

O_2 sampling was performed following all guidance in EPA Method 3A. A California Analytical Instruments model 600 oxygen analyzer (serial number W05004-M) was used to monitor the concentrations of oxygen during each run. The reference method analyzer was operated at a calibration span of 20.38%. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check was also performed prior to testing. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
11.00% Oxygen in Nitrogen
20.38% Oxygen in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located approximately 1.8 diameters from the outlet of the engine exhaust stack.

Moisture

The flue gas moisture content was determined according to the sampling and analytical procedures outlined in EPA Method 4. Four impingers were connected in series and will contain 100ml of water in each of the first two impingers followed by a dry impinger and a fourth impinger containing silica gel. The impingers were

contained in an ice bath in order to assure condensation of the moisture in the flue gas stream. The silica gel outlet temperature was maintained below 68°F. Any moisture that was not condensed in the impingers was captured in the silica gel; therefore, all condensation was weighed and entered into the moisture content calculations.

Volumetric Flow Rate and Heat Input – EPA Method 19

The volumetric flow rate was determined according to the procedures outlined in EPA Method 19. The fuel flow rate and the heat content of the fuel were used to calculate the gas volume produced from the products of combustion.

A fuel sample was taken near the fuel meter location. This fuel sample is analyzed periodically at this location and the results are compared to previous samples for consistency. This analysis was provided and used to perform all calculations concerning heat input values and flow rates.

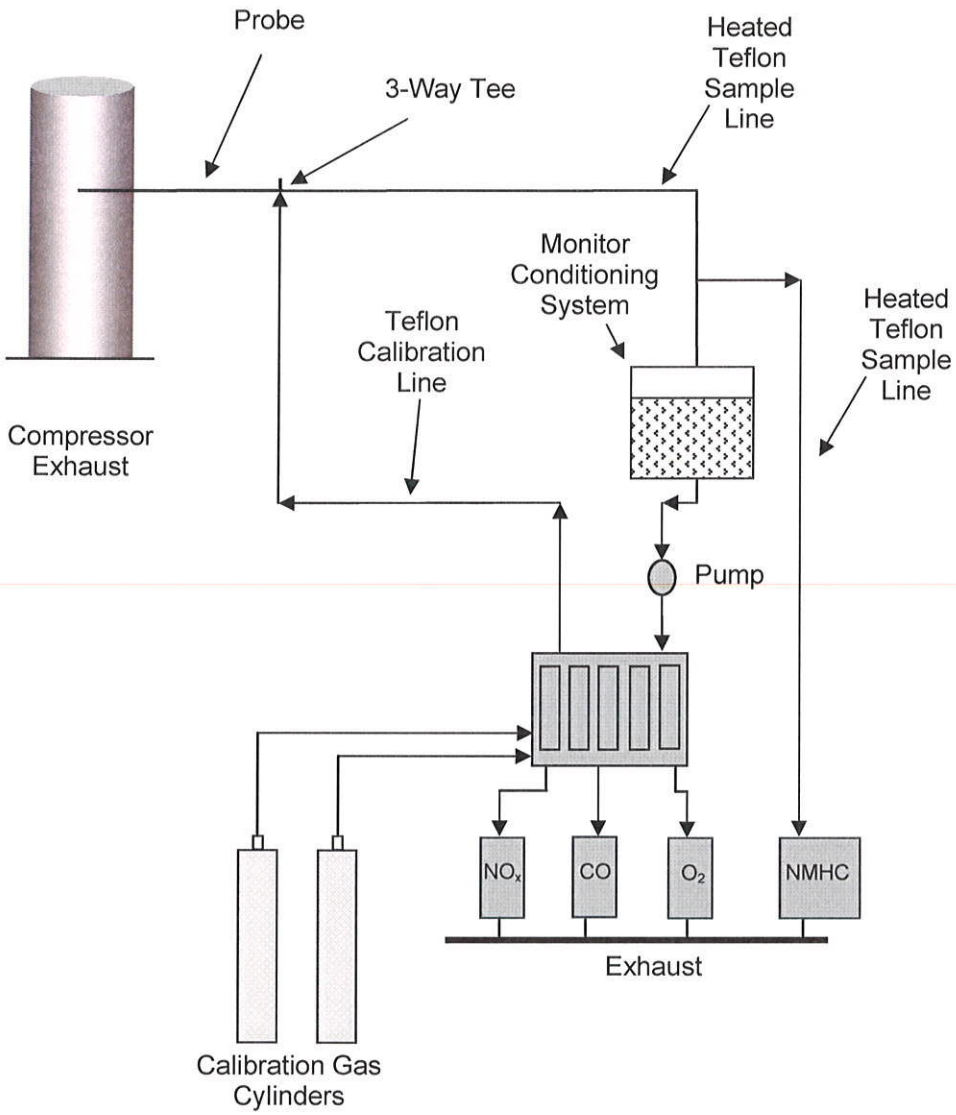
Gas Dilution – EPA Method 205

A gas dilution system, also known as a gas divider, was utilized in order to provide known values of calibration gases through a controlled dilution of a high-level calibration gas with an appropriate dilution gas. The high-level gas used for dilution met all standards of a Protocol gas as set forth by the 40CFR60, Appendix A, Method 7E.

The gas divider met all calibration requirements as requirements set forth in EPA Method 205. A field evaluation check was performed prior to testing where triplicate dilutions of a single high-range calibration gas utilized during testing was made and compared to the expected values. All of these dilution checks showed a deviation from the expected values of less than 2%. Additionally, a mid-level gas was introduced directly to the calibrated analyzer, bypassing the gas divider system, and showed a difference between actual and measured concentrations of less than 2%.

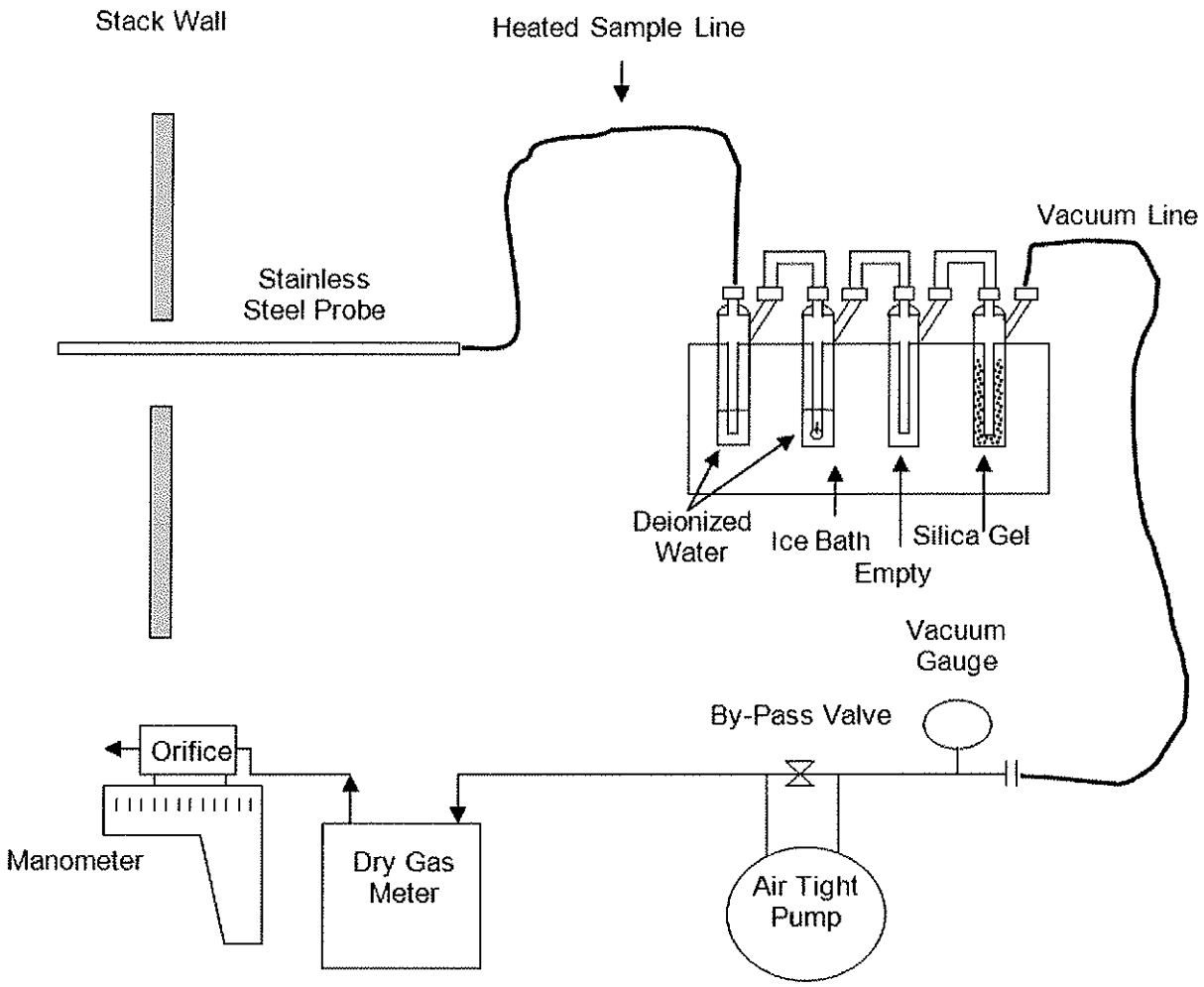
Reference Method Monitors Sampling System

(EPA Methods 3A, 7E, 10 and 25A)



Moisture Sampling System

(EPA Method 4)



DESCRIPTION OF TESTS

Personnel from MidCon Compression arrived at the Harmony Compressor Station site, located in White County, Arkansas at 6:45 a.m. on Thursday, June 10, 2010. The equipment was moved onto the MC2427 engine exhaust stack. The reference method monitors were calibrated and prepared for testing. The NO_2 to NO conversion efficiency check was performed. The first test for oxides of nitrogen, carbon monoxide, non-methane hydrocarbons, oxygen and moisture began at 8:20 a.m. Testing continued until the completion of the third test at 12:03 p.m.

The equipment was moved off of the sampling location and loaded into the test trailer. The data was compiled and reviewed for accuracy and completeness.

All operations at Harmony Compressor Station site, MC2427, located in White County, Arkansas were completed at 1:30 p.m. on Thursday, June 10, 2010.

Appendix A. Example Calculations

NOMENCLATURE

$BSFC$	Brake Specific Fuel Consumption
B_{ws}	Proportion of water vapor, by volume, in the gas stream
C_{avg}	Average unadjusted gas concentration indicated by data recorder for the test run
C_d	Concentration of gas on a dry basis
C_{gas}	Average effluent gas concentration adjusted for bias calibrations
C_m	Average of the initial and final system calibration bias check for the upscale gas
C_{ma}	Actual concentration of the upscale calibration gas
C_o	Average of the initial and final system calibration bias check for the zero gas
C_w	Concentration of gas on a wet basis
CF	Conversion Factor from ppm to lbs./scf -NO_x 1.194 X 10^{-7} -CO 7.273 X 10^{-8} -THC 1.145 X 10^{-7}
CH_4	Methane
CO	Carbon Monoxide
$DSCFH$	Dry standard cubic feet per hour
F_d	Oxygen based F factor
FID	Flame Ionization Detector
FR	Flow Rate of exhaust gas (DSCFH)
$g/BHP-hr$	Grams per brake horsepower hour
ΔH	Average differential pressure across the orifice meter ("H_20)
$lbs.$	Pounds
$lbs./hr.$	Pounds per hour
$M_{\%}$	Percentage of moisture in gas sample
$NMHC$	Nonmethane Hydrocarbon
NOX	Oxides of nitrogen
O_2	Oxygen
O_{2meas}	Average O_2 measured over test period (%)
ppm	Parts per million
ppm_{CH4}	Concentration of methane
ppm_{corr}	ppm corrected to 15% O_2
ppm_{NMHC}	Concentration of NMHC
$ppm_{NMHCinit}$	Initial NMHC contamination fraction, according to § 1065.520
ppm_{THC}	Concentration of THC, as measured by the THC FID
P_b	Barometric pressure
PF_{CH4}	Nonmethane cutter CH4 penetration fraction, according to § 1065.365

NOMENCLATURE (cont.)

PF_{C2H6}	Nonmethane cutter CH4 penetration fraction, according to § 1065.365
Q	Volumetric flow rate (DSCFH)
RF_{CH4}	Response factor of THC FID to CH4 according to § 1065.365
scf	Standard cubic feet
T_m	Average dry gas meter temperature (°F)
THC	Total Hydrocarbons
TPY	Tons per year
V_m	Volume of gas sample as measure by the dry gas meter (dcf)
V_{mstd}	Volume of gas sampled measured by the dry gas meter, corrected to standard conditions (dscf)
V_w	Total volume of liquid collected in impingers and silica gel
V_{wstd}	Volume of water vapor in the sample (scf corrected to standard conditions)
Y	Dry gas meter calibration factor

Example Equations

1. Correction of concentration using bias calibrations (Equation 7E-5b):

$$C_{gas} = (C_{avg} - C_o)\frac{C_{ma}}{C_m - C_o}$$

2. Calculation of Exhaust Flow Rate:

$$FR = \frac{BSFC \times F_d \times 20.9}{(20.9 - O_{2meas})}$$

3. Converting ppm to g/bhp-hr:

$$g/EHP - hr = \frac{Q \times F_d \times BSFC \times CF \times 453.6\frac{g}{lb} \times 20.9}{1{,}000{,}000 \times (20.9 - O_{2meas})}$$

4. Correction of actual ppm concentrations to 15% O_2 (40CFR60, App. B, Performance Specification 2, Equation 2-2):

$$ppm_{corr} = ppm \times \left(\frac{20.9 - 15}{20.9 - O_{2meas}}\right)$$

5. Converting ppm to lbs./hr.:

$$lbs./hr. = ppm \times FR \times CF$$

6. Converting lbs./hr. to TPY:

$$TPY = \frac{lbs./hr. \times 8760}{2000}$$

7. Calculation of Nonmethane Hydrocarbons (Equation 1065.660-2):

$$ppm_{NMHC} = \left[\frac{(PF_{CH4} \times ppm_{THC}) - (RF_{CH4} \times ppm_{CH4})}{(PF_{CH4} - PF_{C2H6})}\right] - ppm_{NMHCimit}$$

Example Equations (cont.)

8. Conversion from wet ppm to dry ppm (Equation 7E-10):

$$C_d = \frac{C_w}{(1 - B_{ws})}$$

9. Calculating Volume of Water Vapor Condensed (Equation 5-2):

$$V_{wstd} = 0.04706 \times V_w$$

10. Calculation of Moisture Content of Sample (Equation 5-3):

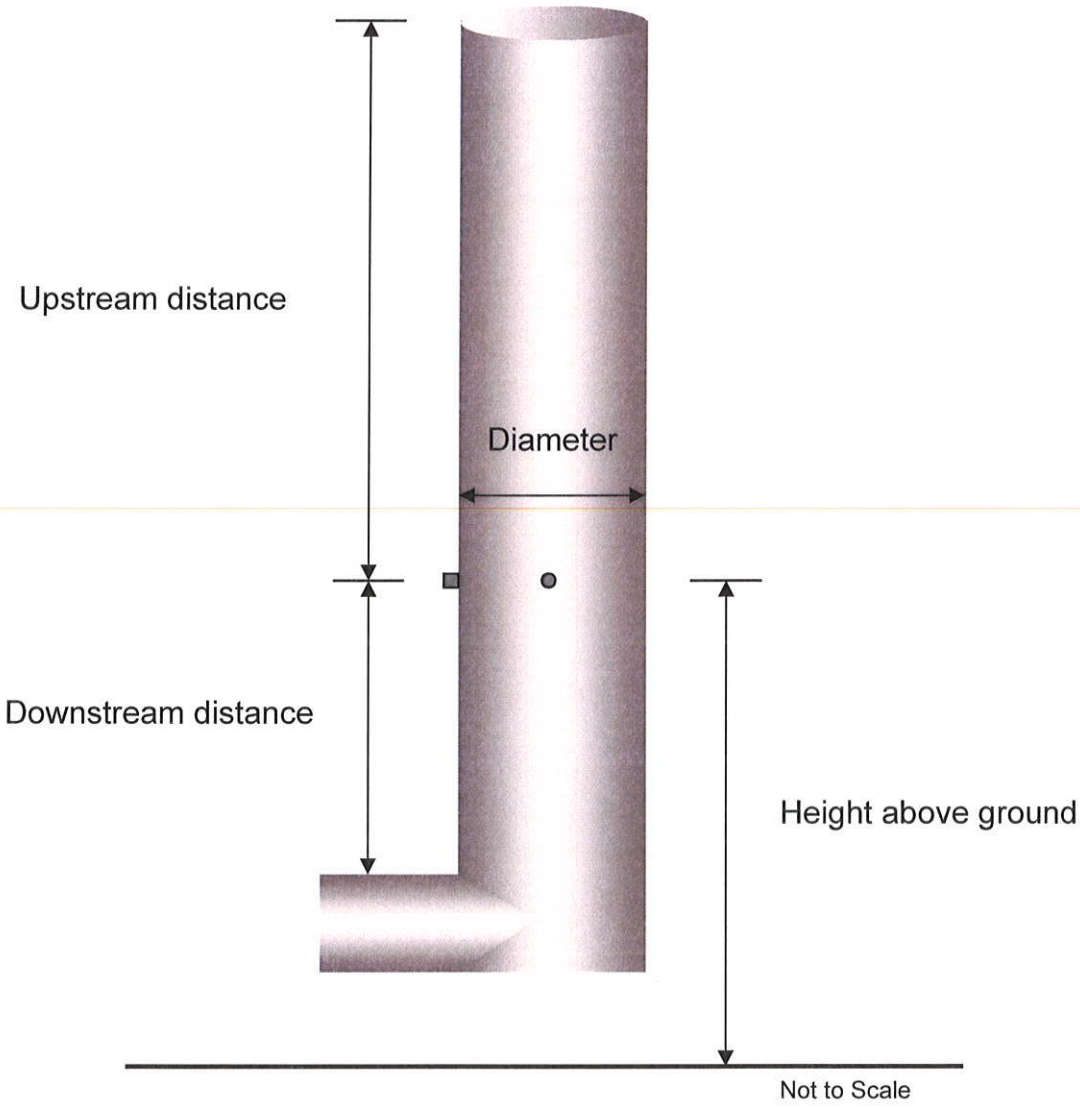
$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}}$$

11. Correction of Dry Gas Volume to Standard Conditions (Equation 5-1):

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460}$$

Appendix B. Location of Sampling Point

The location at which the samples were taken is approximately 22 feet above ground level. The sampling probes were inserted into the 12-inch diameter exhaust duct 22 inches from the stack exhaust and extending approximately 6 inches into the exhaust duct. A diagram of the sampling location is included below.



Upstream Distance: 22 inches
Upstream Diameters: 1.8
Downstream Distance: 26 inches
Downstream Diameters: 2.2

Appendix C. Reference Method Data

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Oxides of Nitrogen
Concentration

Run Number	Measured (ppm)	Adjusted (ppm*)
1	47.59	48.65
2	39.58	40.55
3	38.74	39.91

*Calculated according to equation 7E-5.

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Analyzer Calibration Error Data
Oxides of Nitrogen

6/10/10
Runs 1-3
Span = 192.00 ppm

Gas Level	Certified Cylinder Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Calibration Error (%*)
Zero	0.00	0.10	0.10	0.05
Mid	96.00	99.48	3.48	1.81
High	192.00	195.20	3.20	1.67

* Percent of span

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
System Calibration Bias and Drift Data
Oxides of Nitrogen
Span = 192.00 ppm

	NO_x Calibration					NO_x Zero						
Run Number	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response NO_x Value (ppm)	Analyzer Response Zero Value (ppm)
1	93.21	3.27	94.18	2.76	0.51	0.00	0.05	0.42	0.17	0.22	99.48	0.10
2	94.18	2.76	92.32	3.73	0.97	0.42	0.17	0.25	0.08	0.09	99.48	0.10
3	92.32	3.73	93.59	3.07	0.66	0.25	0.08	0.06	0.02	0.10	99.48	0.10

* Percent of Span

NO2 to NO Conversion Efficiency Test
40CFR60, App. A, Method 7E, Section 8.2.4.1

$$Eff_{NOx} = \frac{C_{Dir}}{C_V} \text{ X } 100 \quad \text{(Eq. 7E-7)}$$

$$Eff_{NOx} = \frac{100.40}{101.00} \text{ X } 100$$

$$= \mathbf{99.41\ \%}$$

* minimum accepted value is 90%

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Carbon Monoxide
Concentration

Run Number	Measured (ppm)	Adjusted (ppm*)
1	188.63	191.70
2	204.47	208.19
3	198.02	199.13

*Calculated according to equation 7E-5.

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Analyzer Calibration Error Data
Carbon Monoxide

DATE
Runs 1 - 3
Span = 466.20 ppm

Gas Range	Certified Cylinder Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Calibrtion Error (ppm*)
Zero	0.00	0.00	0.00	0.00
Mid	233.10	234.03	0.93	0.20
High	466.20	463.31	2.89	0.62

* Percent of span

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
System Calibration Bias and Drift Data
Carbon Monoxide
Span = 466.20 ppm

	CO Calibration					CO Zero						
Run Number	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response CO Value (ppm)	Analyzer Response Zero Value (ppm)
1	234.33	0.06	224.41	2.06	2.13	0.00	0.00	0.00	0.00	0.00	234.03	0.00
2	224.41	2.06	233.46	0.12	1.94	0.00	0.00	0.00	0.00	0.00	234.03	0.00
3	233.46	0.12	230.13	0.84	0.71	0.00	0.00	0.00	0.00	0.00	234.03	0.00

* PERCENT OF SPAN

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Oxygen
Concentration

Run Number	Measured (%)	Adjusted (%*)
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00

*Calculated according to equation 7E-5.

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Analyzer Calibration Data
Oxygen

MCET105006
Runs 1-3
Span = 20.38 %

Gas Range	Actual Calibration Value (%)	Analyzer Calibration Response (%)	Absolute Difference (%)	Difference (%*)
Zero	0.00	0.00	0.00	0.00
Mid	11.00	10.99	0.01	0.05
High	20.38	20.35	0.03	0.15

* Percent of span

Arkansas Midstream Gas Services
Harmony Compressor Station
White County,Arkansas
MC2427
System Calibration Bias and Drift Data
Oxygen
Span = 20.38 percent

	O_2 Calibration					O_2 Zero					Analyzer	Analyzer
Run Number	Initial Response (%)	Initial Bias (%*)	Final Response (%)	Final Bias (%*)	Drift (%*)	Initial Response (%)	Initial Bias (%*)	Final Response (%)	Final Bias (%*)	Drift (%*)	Response O_2 Value (%)	Response Zero Value (%)
1	10.93	0.29	10.93	0.29	0.00	0.00	0.00	0.00	0.00	0.00	10.99	0.00
2	10.93	0.29	10.92	0.34	0.05	0.00	0.00	0.00	0.00	0.00	10.99	0.00
3	10.92	0.34	10.75	1.18	0.83	0.00	0.00	0.00	0.00	0.00	10.99	0.00

Arkansas Midstream Gas Services
Harmony Compressor Station
MC2427
C-17316/1
Total Hydrocarbons
Concentration

Run Number	THC (ppm*)	Methane (ppm*)	NMHC (ppm*)
1	55.28	55.10	0.00
2	56.79	56.52	0.00
3	56.31	57.21	0.00

*as propane

Arkansas Midstream Gas Services
Harmony Compressor Station
White County,Arkansas
MC2427
Analyzer Calibration Data
Total Hydrocarbons

MCET105006
Runs 1-3
Span = 875.00 ppm

Gas Range	Actual Calibration Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Difference (ppm*)
Zero	0.00	0.00	0.00	0.00
Low	235.60	229.03	6.57	2.79
Mid	471.20	467.64	3.56	0.76
High	706.80	709.84	3.04	0.43

* Percent of actual value

Arkansas Midstream Gas Services
Harmony Compressor Station
White County,Arkansas
MC2427
System Calibration Bias and Drift Data
Total Hydrocarbons
Span = 875.00 ppm

	THC Calibration					THC Zero						
Run Number	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response THC Value (ppm)	Analyzer Response Zero Value (ppm)
1	468.12	0.05	476.35	1.00	0.94	0.00	0.00	0.00	0.00	0.00	467.64	0.00
2	476.35	1.00	466.13	0.17	1.17	0.00	0.00	0.00	0.00	0.00	467.64	0.00
3	466.13	0.17	484.53	1.93	2.10	0.00	0.00	0.00	0.00	0.00	467.64	0.00

MidCon COMPRESSION

Method 205 - Calibration Dilution
Quailty Assurance Check

Date:	06/10/10	Field Supervisor:	Mr. Steve Bornsen
Make:	Horiba	Calibration Date:	08/12/09
Model:	SGD-710C	Next Calibration Due:	08/12/10
Serial Number:	D00099DN	Analyzer Utilized:	CO

Gases Utilized During Check

	Cylinder Value	Cylinder Serial Number	Expiration Date
High-Level Supply Gas	2331.00	XC029811B	5/23/2011
Mid-Level Supply Gas	245.70	CC122506	5/23/2011

Linearity Check

	Predicted	Run 1		Run 2		Run 3		Average	
	Reading	Reading	Difference	Reading	Difference	Reading	Difference	Reading	Difference
20%	466.20	472.64	1.38%	470.59	0.94%	468.39	0.47%	470.54	**0.93%**
10%	233.10	231.75	-0.58%	237.18	1.75%	235.16	0.88%	234.70	**0.68%**
Mid-Level Supply Gas	245.70	243.83	-0.76%	243.86	-0.75%	242.63	-1.25%	243.44	**-0.92%**

filename	6/10/2010	6:54:22	e LLC\RATAmation\DATA\MC2427.csv							
testby1	MidCon Compression									
testby2	David									
testby3	MCEL 1									
testby4										
testfor1	Arkansas Midstream Gas Services									
testfor2	MC2427									
testfor3	Harmony Compressor Station									
testfor4										
name			O2	CO	NOx	THC	CH4			
sn			W05004-M	V04055-M	V04057	V05071	V05071			
offset			0.00	0.00	0.00	0.00	0.00			
fullscale			25.00	1000.00	200.00	875.00	875.00			
train			1.00	1.00	1.00	1.00	1.00			
gastype			o2 3a	co 10	nox 7e	thc 25a	thc 25a			
dcg1	6/10/2010	6:54:45	14.11	3.14	0.00	1.70	1.71	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:55:00	0.08	0.86	0.00	1.51	1.71	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:55:15	0.02	1.11	0.00	0.47	1.41	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:55:30	0.01	1.29	0.00	0.29	0.00	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:55:45	0.00	1.53	0.00	0.00	0.00	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:56:00	0.00	1.58	0.00	6.44	0.00	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:56:15	0.00	1.56	0.00	7.04	1.45	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:56:30	0.00	1.50	0.00	0.00	0.91	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:56:45	0.00	0.20	0.00	0.00	0.00	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:57:00	0.00	0.26	0.00	0.00	9.30	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:57:15	0.00	0.31	0.00	63.40	24.57	ALM003310/cg1	N2	0
dcg1	6/10/2010	6:57:30	0.00	0.21	0.00	111.51	92.50	ALM003310/cg1	N2	0
o2ezero1	6/10/2010	6:57:00	0.00	0.26	0.00	0.00	9.30	ALM003310/cg1	N2	0
coezero1	6/10/2010	6:57:00	0.00	0.26	0.00	0.00	9.30	ALM003310/cg1	N2	0
noxezero1	6/10/2010	6:57:00	0.00	0.26	0.00	0.00	9.30	ALM003310/cg1	N2	0
thcezero1	6/10/2010	6:57:00	0.00	0.26	0.00	0.00	9.30	ALM003310/cg1	N2	0
dcg2	6/10/2010	6:58:00	3.77	77.00	2.34	93.51	80.54	AAL20118/cg2	O2	20.38
dcg2	6/10/2010	6:58:15	16.99	46.29	6.12	80.32	74.70	AAL20118/cg2	O2	20.38
dcg2	6/10/2010	6:58:30	20.31	0.00	0.00	91.84	69.86	AAL20118/cg2	O2	20.38
dcg2	6/10/2010	6:58:45	20.34	0.00	0.00	93.97	76.08	AAL20118/cg2	O2	20.38
dcg2	6/10/2010	6:59:00	20.35	0.00	0.00	88.23	86.77	AAL20118/cg2	O2	20.38
dcg2	6/10/2010	6:59:15	20.36	0.21	0.00	92.06	106.60	AAL20118/cg2	O2	20.38
o2high1	6/10/2010	6:59:00	20.35	0.00	0.00	88.23	86.77	AAL20118/cg2	O2	20.38
thcezero1	6/10/2010	6:59:00	20.35	0.00	0.00	88.23	86.77	AAL20118/cg2	O2	20.38
dcg3	6/10/2010	6:59:45	10.62	98.08	4.25	112.30	77.69	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:00:00	11.02	0.05	0.27	106.11	79.25	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:00:15	11.00	0.03	0.00	94.21	89.05	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:00:30	10.99	0.28	0.00	75.10	96.56	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:00:45	10.99	0.54	0.00	70.45	77.75	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:01:00	10.99	0.65	0.00	78.40	82.26	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:01:15	10.99	0.72	0.00	96.33	91.00	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:01:30	10.99	0.86	0.00	109.38	77.08	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:01:45	10.99	0.88	0.00	60.74	70.67	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:02:00	10.99	0.91	0.00	65.41	57.68	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:02:15	10.99	0.90	0.00	75.84	62.93	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:02:30	10.99	0.93	0.00	96.84	66.86	AAL1885/cg3	O2	11
dcg3	6/10/2010	7:02:45	10.99	0.94	0.00	98.15	96.20	AAL1885/cg3	O2	11
o2mid1	6/10/2010	7:02:15	10.99	0.90	0.00	75.84	62.93	AAL1885/cg3	O2	11
ddg10	6/10/2010	7:03:30	0.47	112.34	7.81	73.06	82.77	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:03:45	0.04	342.03	0.97	80.98	80.71	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:04:00	0.02	476.14	0.00	78.73	96.34	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:04:15	0.01	478.53	0.00	74.34	86.89	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:04:30	0.01	476.03	0.00	96.37	79.90	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:04:45	0.01	473.47	0.00	102.51	118.22	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:05:00	0.00	470.48	0.00	101.26	107.27	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:05:15	0.00	467.33	0.00	86.02	86.63	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:05:30	0.00	464.21	0.00	74.55	70.91	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:05:45	0.00	460.82	0.00	64.69	63.87	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:06:00	0.00	457.10	0.00	68.37	53.83	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:06:15	0.00	444.84	0.00	75.62	77.96	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:06:30	0.00	436.10	0.00	98.55	97.20	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:06:45	0.00	431.38	0.00	101.03	70.42	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:07:00	0.00	425.70	0.00	80.32	68.29	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:07:15	0.00	420.07	0.00	73.66	65.80	XCO32439B/dg10	CO	573.48
ddg10	6/10/2010	7:07:30	0.00	414.39	0.00	68.79	63.97	XCO32439B/dg10	CO	573.48
cohigh1	6/10/2010	7:07:30	0.00	414.39	0.00	68.79	63.97	XCO32439B/dg10	CO	573.48
ddg12	6/10/2010	7:23:15	0.00	179.49	2.86	97.16	81.39	XC029811B/dg12	CO	932.4
ddg14	6/10/2010	7:23:45	0.00	200.13	11.18	74.77	62.01	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:24:00	0.01	171.16	7.57	79.78	58.96	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:24:15	0.00	401.55	0.00	90.15	67.08	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:24:30	0.00	406.87	0.00	94.58	73.06	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:24:45	0.00	409.16	0.00	89.31	79.94	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:25:00	0.00	411.12	0.00	59.39	73.83	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:25:15	0.00	427.88	0.00	62.73	62.81	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:25:30	0.00	428.63	0.00	65.37	66.96	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:25:45	0.00	444.86	0.00	73.29	66.68	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:26:00	0.00	469.81	0.00	71.99	59.39	XC029811B/dg14	CO	466.2
cohigh1	6/10/2010	7:26:00	0.00	469.81	0.00	71.99	59.39	XC029811B/dg14	CO	466.2
dcg1	6/10/2010	7:26:15	0.00	388.59	3.26	69.21	69.20	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:26:30	0.01	36.83	5.06	68.72	76.26	ALM003310/cg1	N2	0

dcg1	6/10/2010	7:26:45	0.00	1.51	0.00	66.62	76.06	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:27:00	0.00	0.11	0.00	55.97	64.26	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:27:15	0.00	0.16	0.00	83.88	45.07	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:27:30	0.00	0.11	0.00	104.68	80.29	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:27:45	0.00	0.34	0.00	78.20	88.58	ALM003310/cg1	N2	0
o2ezero1	6/10/2010	7:27:45	0.00	0.34	0.00	78.20	88.58	ALM003310/cg1	N2	0
coezero1	6/10/2010	7:27:30	0.00	0.11	0.00	104.68	80.29	ALM003310/cg1	N2	0
noxezero1	6/10/2010	7:27:30	0.00	0.11	0.00	104.68	80.29	ALM003310/cg1	N2	0
thcezero1	6/10/2010	7:27:30	0.00	0.11	0.00	104.68	80.29	ALM003310/cg1	N2	0
ddg14	6/10/2010	7:28:15	0.00	308.37	14.81	73.27	65.82	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:28:30	0.00	409.05	0.01	86.82	58.32	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:28:45	0.00	416.98	0.00	85.36	59.97	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:29:00	0.00	421.14	0.00	58.75	66.22	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:29:15	0.00	423.24	0.00	80.31	77.55	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:29:30	0.00	464.13	0.00	95.92	99.11	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:29:45	0.00	477.64	0.00	72.29	99.63	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:30:00	0.00	478.70	0.00	69.13	65.18	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:30:15	0.00	479.25	0.00	65.80	64.69	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:30:30	0.00	471.22	0.00	92.40	64.30	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:30:45	0.00	470.87	0.00	94.96	76.04	XC029811B/dg14	CO	466.2
cohigh1	6/10/2010	7:30:30	0.00	471.22	0.00	92.40	64.30	XC029811B/dg14	CO	466.2
ddg15	6/10/2010	7:31:00	0.00	397.87	4.97	65.80	60.36	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:31:15	0.00	405.31	3.26	56.98	32.90	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:31:30	0.00	266.67	0.00	49.77	54.70	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:31:45	0.00	243.78	0.00	59.50	59.81	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:32:00	0.00	243.21	0.00	69.34	54.26	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:32:15	0.00	243.08	0.00	87.16	76.83	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:32:30	0.00	243.25	0.00	60.07	93.35	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:32:45	0.00	243.34	0.00	51.87	56.11	XC029811B/dg15	CO	233.1
comid1	6/10/2010	7:32:45	0.00	243.34	0.00	51.87	56.11	XC029811B/dg15	CO	233.1
dcg1	6/10/2010	7:33:15	0.00	247.25	12.81	77.33	60.46	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:33:30	0.00	0.24	0.43	96.99	77.28	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:33:45	0.00	0.00	0.00	77.77	81.46	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:34:00	0.00	0.00	0.00	82.06	74.55	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:34:15	0.00	0.00	0.00	90.36	74.93	ALM003310/cg1	N2	0
o2ezero1	6/10/2010	7:34:15	0.00	0.00	0.00	90.36	74.93	ALM003310/cg1	N2	0
coezero1	6/10/2010	7:34:00	0.00	0.00	0.00	82.06	74.55	ALM003310/cg1	N2	0
noxezero1	6/10/2010	7:34:00	0.00	0.00	0.00	82.06	74.55	ALM003310/cg1	N2	0
thcezero1	6/10/2010	7:34:00	0.00	0.00	0.00	82.06	74.55	ALM003310/cg1	N2	0
ddg14	6/10/2010	7:34:45	0.00	192.19	6.06	77.42	88.21	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:35:00	0.00	214.71	0.00	106.38	92.09	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:35:15	0.00	441.46	0.00	104.79	97.63	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:35:30	0.00	530.76	0.00	103.61	105.83	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:35:45	0.00	444.21	0.00	63.01	101.34	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:36:00	0.00	444.78	0.00	61.98	69.43	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:36:15	0.00	445.69	0.00	63.87	75.64	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:36:30	0.00	446.37	0.00	72.25	80.54	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:36:45	0.00	447.27	0.00	76.14	95.53	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:37:00	0.00	453.87	0.00	81.39	82.32	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:37:15	0.00	463.31	0.00	81.13	60.46	XC029811B/dg14	CO	466.2
ddg14	6/10/2010	7:37:30	0.00	461.80	0.00	80.96	60.11	XC029811B/dg14	CO	466.2
cohigh1	6/10/2010	7:37:15	0.00	463.31	0.00	81.13	60.46	XC029811B/dg14	CO	466.2
ddg15	6/10/2010	7:38:15	0.00	169.73	29.23	36.32	49.87	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:38:30	0.00	228.83	0.00	63.12	60.03	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:38:45	0.00	229.69	0.00	70.74	65.04	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:39:00	0.00	230.11	0.00	66.86	69.06	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:39:15	0.00	234.03	0.00	69.86	75.84	XC029811B/dg15	CO	233.1
ddg15	6/10/2010	7:39:30	0.00	236.02	0.00	72.21	74.83	XC029811B/dg15	CO	233.1
comid1	6/10/2010	7:39:15	0.00	234.03	0.00	69.86	75.84	XC029811B/dg15	CO	233.1
ddg2	6/10/2010	7:40:15	0.00	233.58	3.80	83.53	93.25	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:40:30	0.01	395.74	91.42	104.60	100.62	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:40:45	0.00	181.92	181.46	101.71	74.81	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:41:00	0.00	182.60	182.18	58.75	77.26	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:41:15	0.00	183.37	179.84	88.98	83.10	ALM013796/dg2	NOx	192
noxhigh1	6/10/2010	7:41:15	0.00	183.37	179.84	88.98	83.10	ALM013796/dg2	NOx	192
dcg1	6/10/2010	7:41:45	0.00	70.65	19.01	62.02	37.20	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:42:00	0.00	0.00	0.35	69.41	64.73	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:42:15	0.00	0.00	0.06	84.60	69.53	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:42:30	0.00	0.00	0.00	70.45	73.49	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:42:45	0.00	0.00	0.00	65.30	75.98	ALM003310/cg1	N2	0
o2ezero1	6/10/2010	7:42:15	0.00	0.00	0.06	84.60	69.53	ALM003310/cg1	N2	0
coezero1	6/10/2010	7:42:15	0.00	0.00	0.06	84.60	69.53	ALM003310/cg1	N2	0
noxezero1	6/10/2010	7:42:30	0.00	0.00	0.00	70.45	73.49	ALM003310/cg1	N2	0
thcezero1	6/10/2010	7:42:30	0.00	0.00	0.00	70.45	73.49	ALM003310/cg1	N2	0
ddg2	6/10/2010	7:43:15	0.00	203.30	79.47	71.96	60.88	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:43:30	0.00	182.49	193.90	81.18	66.15	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:43:45	0.00	183.48	195.20	66.11	68.42	ALM013796/dg2	NOx	192
ddg2	6/10/2010	7:44:00	0.00	184.00	195.55	60.71	71.35	ALM013796/dg2	NOx	192
noxhigh1	6/10/2010	7:43:45	0.00	183.48	195.20	66.11	68.42	ALM013796/dg2	NOx	192
ddg4	6/10/2010	7:44:30	0.00	203.79	41.61	55.21	64.30	ALM013796/dg4	NOx	96
ddg4	6/10/2010	7:44:45	0.00	91.80	96.17	59.32	74.51	ALM013796/dg4	NOx	96
ddg4	6/10/2010	7:45:00	0.00	92.37	99.43	75.41	70.37	ALM013796/dg4	NOx	96
ddg4	6/10/2010	7:45:15	0.00	93.07	99.48	74.36	62.59	ALM013796/dg4	NOx	96
ddg4	6/10/2010	7:45:30	0.00	93.46	99.63	73.49	85.34	ALM013796/dg4	NOx	96
noxmid1	6/10/2010	7:45:15	0.00	93.07	99.48	74.36	62.59	ALM013796/dg4	NOx	96

dcg1	6/10/2010	7:46:15	0.18	82.23	18.33	90.36	45.97	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:46:30	0.53	18.56	4.91	21.28	39.73	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:46:45	0.00	0.37	0.38	0.00	2.02	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:47:00	0.00	0.00	0.19	0.00	0.00	ALM003310/cg1	N2	0
dcg1	6/10/2010	7:47:15	0.00	0.00	0.10	0.00	0.00	ALM003310/cg1	N2	0
o2ezero1	6/10/2010	7:47:15	0.00	0.00	0.10	0.00	0.00	ALM003310/cg1	N2	0
coezero1	6/10/2010	7:47:15	0.00	0.00	0.10	0.00	0.00	ALM003310/cg1	N2	0
noxezero1	6/10/2010	7:47:15	0.00	0.00	0.10	0.00	0.00	ALM003310/cg1	N2	0
thcezero1	6/10/2010	7:47:00	0.00	0.00	0.19	0.00	0.00	ALM003310/cg1	N2	0
ddg20	6/10/2010	7:48:00	0.00	389.52	37.95	49.45	70.71	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:48:15	0.00	184.26	98.87	30.33	29.62	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:48:30	0.00	280.37	200.00	6.81	0.00	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:48:45	0.00	281.80	200.00	0.00	0.00	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:49:00	0.00	282.85	200.00	0.00	0.00	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:49:15	0.00	283.56	200.00	0.00	0.00	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:49:30	0.00	283.97	200.00	0.00	0.00	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:49:45	0.07	255.65	196.97	0.00	0.57	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:50:00	0.05	14.67	42.31	259.94	3.33	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:50:15	0.00	2.30	4.07	705.06	3.69	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:50:30	0.00	0.88	2.64	709.84	4.06	CC45857/dg20	THC	706.8
ddg20	6/10/2010	7:50:45	0.00	0.18	1.97	711.72	4.27	CC45857/dg20	THC	706.8
thchigh1	6/10/2010	7:50:30	0.00	0.88	2.64	709.84	4.06	CC45857/dg20	THC	706.8
ddg22	6/10/2010	7:51:15	0.00	80.58	29.88	358.83	5.13	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:51:30	0.00	29.85	6.02	100.19	2.51	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:51:45	0.00	0.00	1.11	430.37	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:52:00	0.00	0.00	0.77	445.90	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:52:15	0.00	0.00	0.60	447.11	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:52:30	0.00	0.00	0.51	449.69	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:52:45	0.00	0.00	0.38	452.13	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:53:00	0.00	0.00	0.28	459.72	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:53:15	0.00	0.00	0.24	461.60	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:53:30	0.00	0.00	0.16	463.14	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:53:45	0.00	0.00	0.11	464.59	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:54:00	0.00	0.00	0.10	465.23	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:54:15	0.00	0.00	0.07	466.34	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:54:30	0.00	0.00	0.05	467.64	1.71	CC45857/dg22	THC	471.2
ddg22	6/10/2010	7:54:45	0.00	0.00	0.05	468.32	1.71	CC45857/dg22	THC	471.2
thcmid1	6/10/2010	7:54:30	0.00	0.00	0.05	467.64	1.71	CC45857/dg22	THC	471.2
ddg24	6/10/2010	7:55:15	0.00	112.32	1.68	250.57	4.91	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:55:30	0.00	108.48	1.51	82.67	39.31	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:55:45	0.00	5.94	0.49	222.80	41.96	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:56:00	0.00	0.00	0.03	226.87	0.00	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:56:15	0.00	0.00	0.00	228.36	0.00	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:56:30	0.00	0.00	0.00	229.03	0.00	CC45857/dg24	THC	235.6
ddg24	6/10/2010	7:56:45	0.00	0.00	0.00	229.40	0.00	CC45857/dg24	THC	235.6
thclow1	6/10/2010	7:56:30	0.00	0.00	0.00	229.03	0.00	CC45857/dg24	THC	235.6
scg2	6/10/2010	7:57:45	0.24	127.59	6.20	93.00	57.75	AAL20118/cg2	O2	20.38
scg2	6/10/2010	7:58:00	16.24	7.80	1.80	56.65	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	7:58:15	19.82	0.00	0.08	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	7:58:30	19.96	0.00	0.01	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	7:58:45	20.02	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
thczero1	6/10/2010	7:58:30	19.96	0.00	0.01	0.00	0.00	AAL20118/cg2	O2	20.38
scg3	6/10/2010	7:59:00	20.06	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	7:59:15	16.14	48.47	9.85	5.34	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	7:59:30	11.26	3.66	6.16	9.19	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	7:59:45	10.95	0.00	0.05	0.33	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	8:00:00	10.93	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	8:00:15	10.92	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
o2span1	6/10/2010	8:00:00	10.93	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
cozero1	6/10/2010	8:00:00	10.93	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
noxzero1	6/10/2010	8:00:00	10.93	0.00	0.00	0.00	0.00	AAL1885/cg3	O2	11
sdg22	6/10/2010	8:01:00	0.39	214.67	6.55	91.00	28.20	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:01:15	1.77	28.81	1.37	292.65	38.03	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:01:30	0.14	0.00	0.04	452.87	8.29	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:01:45	0.08	0.00	0.00	458.02	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:02:00	0.05	0.00	0.00	458.58	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:02:15	0.04	0.00	0.00	459.29	0.24	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:02:30	0.03	0.00	0.00	464.73	0.43	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:02:45	0.02	0.00	0.00	466.61	0.63	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:03:00	0.01	0.00	0.00	468.12	0.64	CC45857/dg22	THC	471.2
sdg22	6/10/2010	8:03:15	0.01	0.00	0.00	469.10	0.64	CC45857/dg22	THC	471.2
thcspan1	6/10/2010	8:03:00	0.01	0.00	0.00	468.12	0.64	CC45857/dg22	THC	471.2
sdg15	6/10/2010	8:03:45	0.00	147.46	8.91	101.17	12.60	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:04:00	0.00	237.35	21.61	96.30	68.36	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:04:15	0.00	2.12	0.34	101.80	30.56	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:04:30	0.00	91.02	0.06	30.04	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:04:45	0.00	211.17	0.05	8.23	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:05:00	0.00	215.14	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:05:15	0.00	217.16	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:05:30	0.00	218.31	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:05:45	0.00	219.60	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:06:00	0.00	231.67	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:06:15	0.00	234.33	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	8:06:30	0.00	234.67	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
o2zero1	6/10/2010	8:06:30	0.00	234.67	0.00	0.00	0.00	XC029811B/dg15	CO	233.1

cospan1	6/10/2010	8:06:15	0.00	234.33	0.00	0.00	0.00	XC029811B/dg15	CO	233.1
sdg4	6/10/2010	8:07:15	0.00	231.85	20.66	63.08	11.96	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:07:30	0.00	294.45	12.75	63.45	1.05	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:07:45	0.00	126.34	50.60	0.01	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:08:00	0.00	86.96	75.57	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:08:15	0.00	86.65	78.86	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:08:30	0.00	86.85	85.92	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:08:45	0.00	87.03	87.58	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:09:00	0.00	87.21	90.33	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:09:15	0.00	87.48	92.76	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:09:30	0.00	87.92	93.21	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	8:09:45	0.00	88.12	92.79	0.00	0.00	ALM013796/dg4	NOx	96
o2zero1	6/10/2010	8:09:00	0.00	87.21	90.33	0.00	0.00	ALM013796/dg4	NOx	96
noxspan1	6/10/2010	8:09:30	0.00	87.92	93.21	0.00	0.00	ALM013796/dg4	NOx	96
run1	6/10/2010	8:21:45	0.00	205.52	69.17	46.36	55.64			
run1	6/10/2010	8:22:00	0.00	173.26	146.34	47.65	63.87			
run1	6/10/2010	8:22:15	0.00	229.00	31.09	48.92	55.14			
run1	6/10/2010	8:22:30	0.00	126.03	7.25	62.89	52.58			
run1	6/10/2010	8:22:45	0.00	145.87	35.51	62.92	65.28			
run1	6/10/2010	8:23:00	0.00	403.48	156.40	59.39	56.87			
run1	6/10/2010	8:23:15	0.00	190.82	95.76	61.30	48.49			
run1	6/10/2010	8:23:30	0.00	167.30	92.43	61.42	38.01			
run1	6/10/2010	8:23:45	0.00	107.32	75.98	55.12	40.02			
run1	6/10/2010	8:24:00	0.00	126.84	32.01	55.21	47.21			
run1	6/10/2010	8:24:15	0.00	134.08	63.08	55.33	49.35			
run1	6/10/2010	8:24:30	0.00	137.52	19.04	53.42	52.77			
run1	6/10/2010	8:24:45	0.00	505.19	17.94	61.35	78.17			
run1	6/10/2010	8:25:00	0.00	275.10	30.19	82.25	70.67			
run1	6/10/2010	8:25:15	0.00	97.71	25.20	67.21	63.45			
run1	6/10/2010	8:25:30	0.00	171.44	26.72	61.79	72.55			
run1	6/10/2010	8:25:45	0.00	333.12	36.96	68.79	73.37			
run1	6/10/2010	8:26:00	0.00	278.42	33.29	65.61	72.63			
run1	6/10/2010	8:26:15	0.00	392.19	45.37	62.38	65.17			
run1	6/10/2010	8:26:30	0.00	177.65	22.83	35.12	61.42			
run1	6/10/2010	8:26:45	0.00	107.76	8.79	39.81	58.53			
run1	6/10/2010	8:27:00	0.00	126.95	68.30	57.47	56.80			
run1	6/10/2010	8:27:15	0.00	265.82	23.55	53.04	54.90			
run1	6/10/2010	8:27:30	0.00	356.72	20.23	52.47	70.11			
run1	6/10/2010	8:27:45	0.00	163.05	50.74	65.58	63.45			
run1	6/10/2010	8:28:00	0.00	174.11	44.99	63.73	45.10			
run1	6/10/2010	8:28:15	0.00	215.98	31.84	61.95	55.04			
run1	6/10/2010	8:28:30	0.00	150.75	31.05	55.70	61.15			
run1	6/10/2010	8:28:45	0.00	239.67	14.46	57.52	75.20			
run1	6/10/2010	8:29:00	0.00	335.40	43.84	63.45	68.17			
run1	6/10/2010	8:29:15	0.00	171.65	65.00	52.21	61.00			
run1	6/10/2010	8:29:30	0.00	227.43	42.83	47.48	56.23			
run1	6/10/2010	8:29:45	0.00	105.83	62.85	51.91	56.74			
run1	6/10/2010	8:30:00	0.00	116.83	124.97	51.68	59.17			
run1	6/10/2010	8:30:15	0.00	102.56	74.81	51.48	31.83			
run1	6/10/2010	8:30:30	0.00	101.27	35.48	36.52	23.23			
run1	6/10/2010	8:30:45	0.00	223.54	41.30	36.56	55.51			
run1	6/10/2010	8:31:00	0.00	123.88	35.60	40.38	51.78			
run1	6/10/2010	8:31:15	0.00	106.22	16.27	51.53	48.07			
run1	6/10/2010	8:31:30	0.00	148.75	38.34	55.73	61.05			
run1	6/10/2010	8:31:45	0.00	261.90	162.98	50.00	55.97			
run1	6/10/2010	8:32:00	0.00	127.38	120.74	53.43	40.16			
run1	6/10/2010	8:32:15	0.00	58.95	180.14	57.04	33.01			
run1	6/10/2010	8:32:30	0.00	177.64	11.43	64.80	33.13			
run1	6/10/2010	8:32:45	0.00	152.64	10.03	64.86	61.72			
run1	6/10/2010	8:33:00	0.00	199.12	107.21	63.02	56.35			
run1	6/10/2010	8:33:15	0.00	186.26	67.57	48.54	51.27			
run1	6/10/2010	8:33:30	0.00	224.07	34.18	43.75	46.84			
run1	6/10/2010	8:33:45	0.00	327.00	56.85	53.82	50.14			
run1	6/10/2010	8:34:00	0.00	248.05	48.48	53.29	58.53			
run1	6/10/2010	8:34:15	0.00	107.70	36.19	52.77	49.26			
run1	6/10/2010	8:34:30	0.00	168.43	19.30	55.88	46.57			
run1	6/10/2010	8:34:45	0.00	205.36	30.93	54.13	58.96			
run1	6/10/2010	8:35:00	0.00	176.60	18.36	49.35	66.62			
run1	6/10/2010	8:35:15	0.00	145.46	38.06	55.90	74.77			
run1	6/10/2010	8:35:30	0.00	83.37	46.78	57.41	18.81			
run1	6/10/2010	8:35:45	0.00	167.29	103.42	46.36	19.94			
run1	6/10/2010	8:36:00	0.00	221.26	32.52	42.34	37.60			
run1	6/10/2010	8:36:15	0.00	115.33	21.81	38.45	46.87			
run1	6/10/2010	8:36:30	0.00	121.73	20.93	63.55	51.04			
run1	6/10/2010	8:36:45	0.00	313.22	69.10	62.96	52.55			
run1	6/10/2010	8:37:00	0.00	247.54	37.36	54.69	53.09			
run1	6/10/2010	8:37:15	0.00	340.15	26.20	64.19	53.62			
run1	6/10/2010	8:37:30	0.00	186.18	8.68	65.75	39.96			
run1	6/10/2010	8:37:45	0.00	144.87	104.15	40.82	42.03			
run1	6/10/2010	8:38:00	0.00	113.88	34.67	48.44	49.99			
run1	6/10/2010	8:38:15	0.00	230.81	20.94	56.61	55.91			
run1	6/10/2010	8:38:30	0.00	121.39	18.32	61.05	57.85			
run1	6/10/2010	8:38:45	0.00	188.56	17.83	60.33	52.78			
run1	6/10/2010	8:39:00	0.00	445.33	55.91	57.68	54.72			
run1	6/10/2010	8:39:15	0.00	210.79	12.17	55.66	56.61			

run1	6/10/2010	8:39:30	0.00	241.68	28.73	54.39	58.96
run1	6/10/2010	8:39:45	0.00	115.10	31.48	50.42	55.96
run1	6/10/2010	8:40:00	0.00	240.51	24.07	57.42	48.71
run1	6/10/2010	8:40:15	0.00	147.61	51.19	63.87	49.01
run1	6/10/2010	8:40:30	0.00	272.53	45.65	50.42	49.11
run1	6/10/2010	8:40:45	0.00	243.00	38.67	54.93	48.92
run1	6/10/2010	8:41:00	0.00	81.62	25.12	67.29	49.90
run1	6/10/2010	8:41:15	0.00	191.15	25.11	66.99	50.84
run1	6/10/2010	8:41:30	0.00	100.13	162.89	65.08	60.10
run1	6/10/2010	8:41:45	0.00	317.42	122.92	51.70	55.59
run1	6/10/2010	8:42:00	0.00	158.64	57.39	47.81	44.01
run1	6/10/2010	8:42:15	0.00	129.05	70.00	44.01	43.54
run1	6/10/2010	8:42:30	0.00	145.33	35.92	31.67	43.39
run1	6/10/2010	8:42:45	0.00	127.26	13.02	34.49	43.58
run1	6/10/2010	8:43:00	0.00	306.93	51.96	43.58	42.80
run1	6/10/2010	8:43:15	0.00	114.83	75.78	49.99	42.08
run1	6/10/2010	8:43:30	0.00	136.85	78.55	53.63	42.84
run1	6/10/2010	8:43:45	0.00	378.32	67.12	61.52	48.79
run1	6/10/2010	8:44:00	0.00	210.17	27.38	58.55	61.31
run1	6/10/2010	8:44:15	0.00	244.39	47.46	55.76	58.15
run1	6/10/2010	8:44:30	0.00	199.51	18.83	61.67	60.04
run1	6/10/2010	8:44:45	0.00	80.47	65.21	52.58	84.58
run1	6/10/2010	8:45:00	0.00	76.73	29.05	31.40	64.34
run1	6/10/2010	8:45:15	0.00	110.82	60.46	37.09	45.93
run1	6/10/2010	8:45:30	0.00	426.97	57.08	41.22	51.60
run1	6/10/2010	8:45:45	0.00	114.42	53.95	57.47	50.67
run1	6/10/2010	8:46:00	0.00	160.84	47.25	54.03	47.47
run1	6/10/2010	8:46:15	0.00	404.69	76.62	50.84	52.45
run1	6/10/2010	8:46:30	0.00	122.30	65.13	53.59	53.83
run1	6/10/2010	8:46:45	0.00	198.52	94.76	52.74	49.13
run1	6/10/2010	8:47:00	0.00	149.68	21.47	50.42	58.70
run1	6/10/2010	8:47:15	0.00	96.21	17.02	62.35	67.93
run1	6/10/2010	8:47:30	0.00	94.60	26.17	66.67	76.19
run1	6/10/2010	8:47:45	0.00	174.71	12.40	65.16	74.13
run1	6/10/2010	8:48:00	0.00	230.37	16.61	73.53	67.93
run1	6/10/2010	8:48:15	0.00	361.20	54.75	81.18	67.16
run1	6/10/2010	8:48:30	0.00	219.29	37.76	55.44	65.20
run1	6/10/2010	8:48:45	0.00	202.33	40.36	59.94	50.84
run1	6/10/2010	8:49:00	0.00	245.44	39.15	74.55	45.76
run1	6/10/2010	8:49:15	0.00	136.67	43.07	41.81	41.02
run1	6/10/2010	8:49:30	0.00	386.21	71.07	31.23	45.90
run1	6/10/2010	8:49:45	0.00	202.05	63.93	50.42	49.33
run1	6/10/2010	8:50:00	0.00	412.40	34.45	54.97	55.76
run1	6/10/2010	8:50:15	0.00	166.18	78.32	59.39	54.66
run1	6/10/2010	8:50:30	0.00	140.71	33.15	47.41	53.35
run1	6/10/2010	8:50:45	0.00	152.64	20.69	47.34	46.36
run1	6/10/2010	8:51:00	0.00	117.90	44.46	49.56	41.79
run1	6/10/2010	8:51:15	0.00	43.70	94.31	46.03	37.60
run1	6/10/2010	8:51:30	0.00	161.74	61.84	43.89	44.99
run1	6/10/2010	8:51:45	0.00	117.86	33.91	39.09	47.65
run1	6/10/2010	8:52:00	0.00	103.13	76.94	40.72	51.70
run1	6/10/2010	8:52:15	0.00	187.18	16.77	42.08	59.81
run1	6/10/2010	8:52:30	0.00	132.55	26.31	55.29	63.38
run1	6/10/2010	8:52:45	0.00	158.48	11.90	65.34	67.72
run1	6/10/2010	8:53:00	0.00	358.35	42.95	83.10	65.28
run1	6/10/2010	8:53:15	0.00	213.14	23.79	80.47	63.02
run1	6/10/2010	8:53:30	0.00	121.92	53.45	77.30	54.93
run1	6/10/2010	8:53:45	0.00	180.66	18.32	62.16	57.38
run1	6/10/2010	8:54:00	0.00	118.91	46.70	62.05	63.45
run1	6/10/2010	8:54:15	0.00	115.23	16.50	61.95	59.30
run1	6/10/2010	8:54:30	0.00	260.55	33.88	54.43	60.06
run1	6/10/2010	8:54:45	0.00	107.78	53.50	53.83	75.84
run1	6/10/2010	8:55:00	0.00	158.12	47.81	53.83	65.07
run1	6/10/2010	8:55:15	0.00	135.17	28.10	49.02	55.76
run1	6/10/2010	8:55:30	0.00	159.64	13.94	49.97	61.85
run1	6/10/2010	8:55:45	0.00	200.13	24.36	68.57	61.40
run1	6/10/2010	8:56:00	0.00	441.34	84.31	65.54	59.39
run1	6/10/2010	8:56:15	0.00	119.84	66.96	62.81	63.39
run1	6/10/2010	8:56:30	0.00	142.27	147.64	44.12	64.43
run1	6/10/2010	8:56:45	0.00	211.90	64.89	45.60	60.81
run1	6/10/2010	8:57:00	0.00	188.40	21.74	51.27	68.45
run1	6/10/2010	8:57:15	0.00	132.08	20.52	54.86	74.98
run1	6/10/2010	8:57:30	0.00	118.29	31.61	55.57	29.75
run1	6/10/2010	8:57:45	0.00	133.35	91.66	51.27	34.56
run1	6/10/2010	8:58:00	0.00	44.89	148.51	41.53	50.42
run1	6/10/2010	8:58:15	0.00	172.54	62.64	32.90	49.65
run1	6/10/2010	8:58:30	0.00	104.23	21.80	40.19	50.99
run1	6/10/2010	8:58:45	0.00	144.11	11.23	46.60	61.31
run1	6/10/2010	8:59:00	0.00	114.37	25.57	58.32	57.61
run1	6/10/2010	8:59:15	0.00	199.30	34.10	55.31	54.26
run1	6/10/2010	8:59:30	0.00	243.38	47.88	53.98	64.83
run1	6/10/2010	8:59:45	0.00	179.64	37.44	51.91	59.53
run1	6/10/2010	9:00:00	0.00	209.86	25.57	56.40	46.78
run1	6/10/2010	9:00:15	0.00	97.07	43.60	60.03	45.22
run1	6/10/2010	9:00:30	0.00	215.01	10.38	74.44	46.19

run1	6/10/2010	9:00:45	0.00	138.64	17.54	76.08	57.68
run1	6/10/2010	9:01:00	0.00	126.95	55.84	76.90	52.37
run1	6/10/2010	9:01:15	0.00	55.01	47.86	57.49	47.55
run1	6/10/2010	9:01:30	0.00	191.50	46.32	50.81	49.79
run1	6/10/2010	9:01:45	0.00	261.74	40.08	56.18	49.02
run1	6/10/2010	9:02:00	0.00	151.55	27.87	58.21	47.00
run1	6/10/2010	9:02:15	0.00	169.40	13.99	60.03	61.28
run1	6/10/2010	9:02:30	0.00	119.26	18.76	59.83	67.21
run1	6/10/2010	9:02:45	0.00	209.80	14.08	60.50	75.84
run1	6/10/2010	9:03:00	0.00	158.38	65.20	61.95	60.73
run1	6/10/2010	9:03:15	0.00	65.63	115.00	52.64	48.07
run1	6/10/2010	9:03:30	0.00	88.79	64.66	51.11	51.23
run1	6/10/2010	9:03:45	0.00	172.14	115.50	63.87	53.02
run1	6/10/2010	9:04:00	0.00	282.62	29.82	65.10	55.97
run1	6/10/2010	9:04:15	0.00	204.33	55.99	66.22	62.29
run1	6/10/2010	9:04:30	0.00	258.46	145.55	58.05	63.13
run1	6/10/2010	9:04:45	0.00	134.08	25.80	55.06	52.34
run1	6/10/2010	9:05:00	0.00	168.00	20.06	49.99	59.09
run1	6/10/2010	9:05:15	0.00	305.09	40.34	62.41	65.37
run1	6/10/2010	9:05:30	0.00	242.71	33.92	62.48	63.57
run1	6/10/2010	9:05:45	0.00	158.20	59.33	32.47	57.64
run1	6/10/2010	9:06:00	0.00	161.49	45.72	42.08	45.12
run1	6/10/2010	9:06:15	0.00	144.95	20.40	50.42	46.31
run1	6/10/2010	9:06:30	0.00	190.56	24.67	76.59	48.11
run1	6/10/2010	9:06:45	0.00	136.74	116.45	71.08	57.04
run1	6/10/2010	9:07:00	0.00	151.22	93.52	55.76	53.22
run1	6/10/2010	9:07:15	0.00	199.71	26.31	60.06	49.77
run1	6/10/2010	9:07:30	0.00	171.84	34.84	61.79	58.63
run1	6/10/2010	9:07:45	0.00	302.02	45.32	62.16	57.31
run1	6/10/2010	9:08:00	0.00	143.83	60.18	65.61	53.41
run1	6/10/2010	9:08:15	0.00	149.85	72.92	68.79	54.50
run1	6/10/2010	9:08:30	0.00	112.97	38.49	31.25	53.32
run1	6/10/2010	9:08:45	0.00	401.03	59.27	36.96	41.80
run1	6/10/2010	9:09:00	0.00	295.79	39.80	54.05	43.86
run1	6/10/2010	9:09:15	0.00	151.71	20.92	55.76	45.72
run1	6/10/2010	9:09:30	0.00	121.60	7.73	57.19	70.71
run1	6/10/2010	9:09:45	0.00	189.71	22.30	62.16	73.40
run1	6/10/2010	9:10:00	0.00	121.01	9.06	72.42	74.55
run1	6/10/2010	9:10:15	0.00	123.10	67.35	81.82	61.25
run1	6/10/2010	9:10:30	0.00	164.96	54.08	59.50	55.51
run1	6/10/2010	9:10:45	0.00	215.51	43.77	61.71	47.85
run1	6/10/2010	9:11:00	0.00	181.93	106.48	69.21	47.70
run1	6/10/2010	9:11:15	0.00	115.37	180.89	56.34	47.55
run1	6/10/2010	9:11:30	0.00	353.16	88.42	45.56	52.75
run1	6/10/2010	9:11:45	0.00	216.60	17.25	2.15	47.01
run1	6/10/2010	9:12:00	0.00	149.71	22.30	24.23	35.25
run1	6/10/2010	9:12:15	0.00	139.26	62.57	44.01	42.81
run1	6/10/2010	9:12:30	0.00	497.27	47.54	54.22	47.03
run1	6/10/2010	9:12:45	0.00	222.28	56.32	51.23	55.76
run1	6/10/2010	9:13:00	0.00	132.44	62.26	43.15	52.87
run1	6/10/2010	9:13:15	0.00	206.17	58.03	52.59	50.20
run1	6/10/2010	9:13:30	0.00	171.05	22.80	54.35	60.01
run1	6/10/2010	9:13:45	0.00	138.67	72.09	44.43	60.63
run1	6/10/2010	9:14:00	0.00	77.46	64.13	47.78	60.24
run1	6/10/2010	9:14:15	0.00	122.25	51.87	50.63	65.37
run1	6/10/2010	9:14:30	0.00	137.99	89.42	53.99	66.54
run1	6/10/2010	9:14:45	0.00	151.32	31.79	57.02	61.74
run1	6/10/2010	9:15:00	0.00	184.03	49.48	62.38	56.24
run1	6/10/2010	9:15:15	0.00	125.08	23.56	58.85	51.27
run1	6/10/2010	9:15:30	0.00	150.72	49.54	56.64	65.16
run1	6/10/2010	9:15:45	0.00	223.11	21.60	51.06	66.01
run1	6/10/2010	9:16:00	0.00	94.63	44.82	48.38	66.86
run1	6/10/2010	9:16:15	0.00	108.97	27.09	45.93	40.25
run1	6/10/2010	9:16:30	0.00	85.94	61.02	31.56	32.73
run1	6/10/2010	9:16:45	0.00	151.32	29.90	36.50	43.37
run1	6/10/2010	9:17:00	0.00	123.03	19.20	48.07	57.96
run1	6/10/2010	9:17:15	0.00	102.15	26.45	51.63	70.50
run1	6/10/2010	9:17:30	0.00	72.67	28.58	52.64	55.16
run1	6/10/2010	9:17:45	0.00	201.11	19.82	50.63	59.74
run1	6/10/2010	9:18:00	0.00	186.02	19.83	56.68	71.35
run1	6/10/2010	9:18:15	0.00	210.92	44.13	62.16	66.74
run1	6/10/2010	9:18:30	0.00	114.75	81.25	56.51	63.86
run1	6/10/2010	9:18:45	0.00	223.16	44.85	58.31	56.18
run1	6/10/2010	9:19:00	0.00	246.29	28.61	62.81	55.29
run1	6/10/2010	9:19:15	0.00	219.21	23.45	78.00	54.47
run1	6/10/2010	9:19:30	0.00	106.28	46.06	78.83	38.30
run1	6/10/2010	9:19:45	0.00	265.04	23.40	46.36	42.74
run1	6/10/2010	9:20:00	0.00	226.89	18.34	52.37	53.41
run1	6/10/2010	9:20:15	0.00	192.69	10.91	57.68	72.56
run1	6/10/2010	9:20:30	0.00	322.45	52.57	67.12	77.43
run1	6/10/2010	9:20:45	0.00	245.02	28.70	70.10	61.95
run1	6/10/2010	9:21:00	0.00	535.25	67.76	74.55	66.74
run1	6/10/2010	9:21:15	0.00	218.49	15.38	61.55	71.14
run1	6/10/2010	9:21:30	0.00	183.38	49.67	56.97	52.51
run1	6/10/2010	9:21:45	0.00	122.87	13.37	56.40	53.32

run1	6/10/2010	9:22:00	0.00	215.43	44.64	56.15	57.68			
run1	6/10/2010	9:22:15	0.00	574.09	43.70	55.97	61.13			
run1	6/10/2010	9:22:30	0.00	156.72	88.84	58.55	62.98			
run1	6/10/2010	9:22:45	0.00	167.42	163.80	52.72	67.29			
run1	6/10/2010	9:23:00	0.00	162.52	58.83	41.23	63.23			
run1	6/10/2010	9:23:15	0.00	164.37	57.43	56.98	59.60			
run1	6/10/2010	9:23:30	0.00	302.67	110.30	62.45	47.58			
run1	6/10/2010	9:23:45	0.00	323.11	84.39	58.75	51.78			
averun1	6/10/2010	8:22:45	0.00	188.63	47.59	55.28	55.10	60		
scg2	6/10/2010	9:24:30	0.00	161.31	42.17	51.95	51.08	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:24:45	2.41	64.13	163.69	34.79	67.92	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:25:00	18.91	1.82	8.58	0.00	31.22	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:25:15	19.87	0.00	1.67	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:25:30	19.97	0.00	1.05	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:25:45	20.03	0.00	0.75	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:26:00	20.06	0.00	0.58	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	9:26:15	20.09	0.00	0.42	0.00	0.00	AAL20118/cg2	O2	20.38
thczero1	6/10/2010	9:26:00	20.06	0.00	0.58	0.00	0.00	AAL20118/cg2	O2	20.38
scg3	6/10/2010	9:26:30	20.11	0.11	0.36	0.00	5.23	AAL1885/cg3	O2	11
scg3	6/10/2010	9:26:45	12.17	176.55	42.17	0.00	40.59	AAL1885/cg3	O2	11
scg3	6/10/2010	9:27:00	11.05	1.12	2.65	0.00	19.48	AAL1885/cg3	O2	11
scg3	6/10/2010	9:27:15	10.93	0.00	0.42	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	9:27:30	10.91	0.00	0.18	0.00	0.00	AAL1885/cg3	O2	11
o2span1	6/10/2010	9:27:15	10.93	0.00	0.42	0.00	0.00	AAL1885/cg3	O2	11
cozero1	6/10/2010	9:27:15	10.93	0.00	0.42	0.00	0.00	AAL1885/cg3	O2	11
noxzero1	6/10/2010	9:27:15	10.93	0.00	0.42	0.00	0.00	AAL1885/cg3	O2	11
sdg4	6/10/2010	9:28:30	0.30	185.82	31.17	76.49	44.22	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:28:45	1.15	112.50	51.29	51.80	63.03	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:29:00	0.79	78.79	85.16	0.00	29.98	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:29:15	0.06	82.99	87.02	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:29:30	0.03	84.10	88.68	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:29:45	0.01	84.98	89.32	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:30:00	0.00	91.02	94.18	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:30:15	0.00	93.34	97.89	0.00	0.00	ALM013796/dg4	NOx	96
o2zero1	6/10/2010	9:30:15	0.00	93.34	97.89	0.00	0.00	ALM013796/dg4	NOx	96
noxspan1	6/10/2010	9:30:00	0.00	91.02	94.18	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:31:00	0.00	102.91	48.05	55.33	34.11	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:31:15	0.00	128.73	23.43	40.12	57.04	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:31:30	0.00	42.42	46.67	28.53	0.70	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:31:45	0.00	117.63	32.27	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:32:00	0.00	211.10	1.98	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:32:15	0.00	215.04	0.84	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:32:30	0.00	217.33	0.59	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:32:45	0.00	219.19	0.43	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:33:00	0.00	220.75	0.28	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:33:15	0.00	242.99	0.24	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:33:30	0.00	334.12	18.35	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:33:45	0.00	101.48	94.05	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:34:00	0.00	98.32	99.41	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:34:15	0.00	97.85	100.25	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:34:30	0.00	97.85	100.45	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:34:45	0.00	97.98	98.33	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:35:00	0.00	98.13	97.40	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:35:15	0.00	98.49	95.92	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	9:35:30	0.00	98.60	95.82	0.00	0.00	ALM013796/dg4	NOx	96
o2zero1	6/10/2010	9:33:45	0.00	101.48	94.05	0.00	0.00	ALM013796/dg4	NOx	96
noxspan1	6/10/2010	9:35:15	0.00	98.49	95.92	0.00	0.00	ALM013796/dg4	NOx	96
sdg15	6/10/2010	9:36:00	0.00	99.63	69.20	39.88	1.50	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:36:15	0.00	52.07	67.96	65.58	0.29	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:36:30	0.00	41.93	42.70	0.61	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:36:45	0.00	171.53	19.28	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:37:00	0.00	215.14	1.54	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:37:15	0.00	218.38	1.01	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:37:30	0.00	220.69	0.78	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:37:45	0.00	222.27	0.63	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:38:00	0.00	223.28	0.48	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:38:15	0.00	223.86	0.36	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:38:30	0.00	224.41	0.28	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:38:45	0.00	224.95	0.22	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	9:39:00	0.00	236.65	0.14	0.00	0.00	XC029811B/dg15	CO	233.1
o2zero1	6/10/2010	9:39:00	0.00	236.65	0.14	0.00	0.00	XC029811B/dg15	CO	233.1
cospan1	6/10/2010	9:38:30	0.00	224.41	0.28	0.00	0.00	XC029811B/dg15	CO	233.1
sdg22	6/10/2010	9:39:30	0.00	200.99	0.64	28.74	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:39:45	0.00	103.53	28.24	84.17	21.31	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:40:00	0.00	644.26	23.74	23.20	39.95	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:40:15	0.00	810.35	0.53	0.00	3.13	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:40:30	0.00	575.23	0.24	0.00	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:40:45	0.00	13.51	0.12	246.91	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:41:00	0.00	4.69	0.09	472.11	0.30	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:41:15	0.00	2.33	0.05	475.31	0.46	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:41:30	0.00	1.22	0.05	476.35	0.64	CC45857/dg22	THC	471.2
sdg22	6/10/2010	9:41:45	0.00	0.39	0.00	478.09	0.64	CC45857/dg22	THC	471.2
thcspan1	6/10/2010	9:41:30	0.00	1.22	0.05	476.35	0.64	CC45857/dg22	THC	471.2
run2	6/10/2010	9:42:45	0.00	216.70	5.22	83.37	65.58			
run2	6/10/2010	9:43:00	0.00	141.83	45.75	97.20	60.01			

run2	6/10/2010	9:43:15	0.00	175.80	48.10	58.50	57.92
run2	6/10/2010	9:43:30	0.00	186.59	45.37	57.78	58.11
run2	6/10/2010	9:43:45	0.00	130.79	25.62	61.10	58.78
run2	6/10/2010	9:44:00	0.00	186.90	27.35	70.45	59.39
run2	6/10/2010	9:44:15	0.00	174.15	44.31	72.30	73.93
run2	6/10/2010	9:44:30	0.00	142.11	43.29	64.09	69.58
run2	6/10/2010	9:44:45	0.00	265.48	39.68	60.47	58.11
run2	6/10/2010	9:45:00	0.00	156.43	31.36	57.47	51.24
run2	6/10/2010	9:45:15	0.00	311.31	29.66	63.79	51.80
run2	6/10/2010	9:45:30	0.00	350.75	25.57	64.74	70.05
run2	6/10/2010	9:45:45	0.00	225.88	9.45	65.58	75.81
run2	6/10/2010	9:46:00	0.00	266.07	44.20	65.58	80.96
run2	6/10/2010	9:46:15	0.00	188.57	18.97	66.76	73.02
run2	6/10/2010	9:46:30	0.00	126.77	22.53	74.34	69.13
run2	6/10/2010	9:46:45	0.00	372.02	31.82	71.66	61.74
run2	6/10/2010	9:47:00	0.00	323.75	24.66	69.21	67.32
run2	6/10/2010	9:47:15	0.00	161.39	8.20	71.24	69.31
run2	6/10/2010	9:47:30	0.00	270.44	53.36	71.14	70.07
run2	6/10/2010	9:47:45	0.00	441.00	48.19	70.28	64.88
run2	6/10/2010	9:48:00	0.00	139.40	94.74	51.54	60.46
run2	6/10/2010	9:48:15	0.00	122.56	25.76	50.05	50.59
run2	6/10/2010	9:48:30	0.00	178.53	25.92	82.02	52.94
run2	6/10/2010	9:48:45	0.00	261.39	42.34	75.37	59.39
run2	6/10/2010	9:49:00	0.00	171.42	38.00	69.23	51.53
run2	6/10/2010	9:49:15	0.00	195.49	33.23	82.54	49.52
run2	6/10/2010	9:49:30	0.00	186.41	40.24	70.21	56.61
run2	6/10/2010	9:49:45	0.00	151.17	23.76	42.73	27.19
run2	6/10/2010	9:50:00	0.00	153.08	101.42	24.97	0.00
run2	6/10/2010	9:50:15	0.00	114.05	29.55	23.84	38.92
run2	6/10/2010	9:50:30	0.00	125.07	18.01	60.03	43.95
run2	6/10/2010	9:50:45	0.00	113.28	24.64	53.65	47.60
run2	6/10/2010	9:51:00	0.00	127.38	11.04	48.07	66.35
run2	6/10/2010	9:51:15	0.00	86.51	49.12	57.71	69.98
run2	6/10/2010	9:51:30	0.00	104.13	49.56	62.81	49.35
run2	6/10/2010	9:51:45	0.00	264.68	23.04	71.76	53.38
run2	6/10/2010	9:52:00	0.00	177.12	17.58	73.84	57.04
run2	6/10/2010	9:52:15	0.00	157.86	9.64	72.72	67.72
run2	6/10/2010	9:52:30	0.00	225.96	40.38	59.81	60.66
run2	6/10/2010	9:52:45	0.00	194.73	36.36	60.28	44.43
run2	6/10/2010	9:53:00	0.00	156.20	62.73	60.67	47.37
run2	6/10/2010	9:53:15	0.00	192.58	77.55	39.93	47.78
run2	6/10/2010	9:53:30	0.00	246.35	40.65	35.99	42.51
run2	6/10/2010	9:53:45	0.00	199.28	20.74	31.62	39.46
run2	6/10/2010	9:54:00	0.00	196.11	50.26	29.17	36.74
run2	6/10/2010	9:54:15	0.00	353.45	27.53	32.66	44.63
run2	6/10/2010	9:54:30	0.00	456.32	43.28	60.46	53.16
run2	6/10/2010	9:54:45	0.00	808.29	179.63	79.13	70.07
run2	6/10/2010	9:55:00	0.00	816.88	20.79	96.34	83.03
run2	6/10/2010	9:55:15	0.00	195.33	54.35	56.20	81.42
run2	6/10/2010	9:55:30	0.00	195.51	22.79	48.15	39.34
run2	6/10/2010	9:55:45	0.00	278.74	27.51	38.45	43.71
run2	6/10/2010	9:56:00	0.00	197.27	20.81	51.17	47.42
run2	6/10/2010	9:56:15	0.00	88.44	52.45	57.34	46.04
run2	6/10/2010	9:56:30	0.00	76.19	52.80	64.94	46.57
run2	6/10/2010	9:56:45	0.00	148.99	31.40	65.28	47.85
run2	6/10/2010	9:57:00	0.00	158.15	91.85	65.58	47.85
run2	6/10/2010	9:57:15	0.00	140.19	44.81	49.38	48.48
run2	6/10/2010	9:57:30	0.00	162.52	93.81	51.67	52.55
run2	6/10/2010	9:57:45	0.00	152.15	7.90	58.32	66.75
run2	6/10/2010	9:58:00	0.00	160.30	25.72	60.38	79.90
run2	6/10/2010	9:58:15	0.00	368.60	49.81	62.61	64.60
run2	6/10/2010	9:58:30	0.00	207.94	19.11	73.27	59.63
run2	6/10/2010	9:58:45	0.00	158.59	18.14	70.28	52.55
run2	6/10/2010	9:59:00	0.00	230.27	19.08	67.72	57.19
run2	6/10/2010	9:59:15	0.00	173.58	32.69	56.10	58.72
run2	6/10/2010	9:59:30	0.00	168.44	37.77	56.94	57.25
run2	6/10/2010	9:59:45	0.00	172.82	16.77	60.67	68.46
run2	6/10/2010	10:00:00	0.00	119.45	70.72	35.83	78.68
run2	6/10/2010	10:00:15	0.00	124.61	20.55	29.81	55.98
run2	6/10/2010	10:00:30	0.00	280.52	80.06	44.86	55.53
run2	6/10/2010	10:00:45	0.00	173.31	107.03	47.20	57.25
run2	6/10/2010	10:01:00	0.00	303.89	54.54	49.13	56.47
run2	6/10/2010	10:01:15	0.00	617.48	47.51	65.55	56.37
run2	6/10/2010	10:01:30	0.00	416.39	33.88	62.83	57.68
run2	6/10/2010	10:01:45	0.00	228.06	10.62	55.12	73.37
run2	6/10/2010	10:02:00	0.00	256.41	19.83	56.50	86.95
run2	6/10/2010	10:02:15	0.00	185.27	33.62	57.71	49.21
run2	6/10/2010	10:02:30	0.00	129.17	5.02	61.74	52.81
run2	6/10/2010	10:02:45	0.00	77.20	9.01	62.96	67.08
run2	6/10/2010	10:03:00	0.00	115.74	30.56	64.09	65.04
run2	6/10/2010	10:03:15	0.00	298.31	73.20	49.06	62.21
run2	6/10/2010	10:03:30	0.00	132.93	45.78	52.78	47.64
run2	6/10/2010	10:03:45	0.00	186.33	49.81	62.81	49.65
run2	6/10/2010	10:04:00	0.00	112.81	41.72	55.31	51.27
run2	6/10/2010	10:04:15	0.00	190.51	12.10	52.05	62.72

run2	6/10/2010	10:04:30	0.00	149.04	85.44	48.49	65.64
run2	6/10/2010	10:04:45	0.00	132.67	11.76	54.02	69.43
run2	6/10/2010	10:05:00	0.00	67.59	17.77	58.96	66.48
run2	6/10/2010	10:05:15	0.00	144.12	26.99	66.25	65.48
run2	6/10/2010	10:05:30	0.00	166.21	136.03	53.68	66.22
run2	6/10/2010	10:05:45	0.00	143.47	34.27	26.70	51.51
run2	6/10/2010	10:06:00	0.00	113.07	6.39	54.25	38.03
run2	6/10/2010	10:06:15	0.00	102.82	67.72	63.50	75.87
run2	6/10/2010	10:06:30	0.00	48.31	128.28	63.87	68.17
run2	6/10/2010	10:06:45	0.00	199.17	44.29	65.97	45.93
run2	6/10/2010	10:07:00	0.00	205.71	41.01	67.72	54.93
run2	6/10/2010	10:07:15	0.00	246.35	29.78	55.09	57.69
run2	6/10/2010	10:07:30	0.00	129.72	20.73	58.92	54.26
run2	6/10/2010	10:07:45	0.00	139.75	5.78	68.79	68.62
run2	6/10/2010	10:08:00	0.00	133.68	12.31	39.34	81.60
run2	6/10/2010	10:08:15	0.00	156.77	22.24	29.25	47.23
run2	6/10/2010	10:08:30	0.00	187.79	43.93	37.38	46.87
run2	6/10/2010	10:08:45	0.00	62.06	35.80	50.63	49.77
run2	6/10/2010	10:09:00	0.00	75.03	65.66	62.81	46.26
run2	6/10/2010	10:09:15	0.00	328.60	18.45	74.11	46.03
run2	6/10/2010	10:09:30	0.00	164.13	22.58	68.84	52.77
run2	6/10/2010	10:09:45	0.00	92.87	39.85	57.47	53.11
run2	6/10/2010	10:10:00	0.00	155.70	17.08	72.63	53.41
run2	6/10/2010	10:10:15	0.00	491.23	28.70	76.25	74.70
run2	6/10/2010	10:10:30	0.00	235.92	37.68	64.09	70.27
run2	6/10/2010	10:10:45	0.00	368.38	45.06	44.63	57.68
run2	6/10/2010	10:11:00	0.00	145.64	7.21	26.92	46.60
run2	6/10/2010	10:11:15	0.00	135.91	29.26	44.29	46.81
run2	6/10/2010	10:11:30	0.00	155.99	52.31	45.84	77.75
run2	6/10/2010	10:11:45	0.00	179.48	80.24	47.00	57.37
run2	6/10/2010	10:12:00	0.00	151.82	64.24	57.39	41.02
run2	6/10/2010	10:12:15	0.00	80.32	31.06	61.78	49.30
run2	6/10/2010	10:12:30	0.00	133.59	30.13	66.65	50.96
run2	6/10/2010	10:12:45	0.00	163.93	42.91	63.72	52.77
run2	6/10/2010	10:13:00	0.00	152.28	26.24	61.10	61.14
run2	6/10/2010	10:13:15	0.00	199.68	15.04	59.13	66.59
run2	6/10/2010	10:13:30	0.00	254.43	13.75	62.26	80.32
run2	6/10/2010	10:13:45	0.00	146.76	29.42	69.21	68.96
run2	6/10/2010	10:14:00	0.00	122.15	36.93	63.95	58.53
run2	6/10/2010	10:14:15	0.00	139.16	40.82	62.08	67.38
run2	6/10/2010	10:14:30	0.00	152.95	40.96	61.52	70.81
run2	6/10/2010	10:14:45	0.00	454.30	36.12	66.81	76.90
run2	6/10/2010	10:15:00	0.00	201.89	10.00	71.14	67.52
run2	6/10/2010	10:15:15	0.00	279.28	5.72	88.51	66.41
run2	6/10/2010	10:15:30	0.00	283.33	18.41	79.62	83.30
run2	6/10/2010	10:15:45	0.00	298.99	9.73	59.39	82.74
run2	6/10/2010	10:16:00	0.00	483.55	42.91	68.49	82.25
run2	6/10/2010	10:16:15	0.00	164.21	71.99	68.36	55.74
run2	6/10/2010	10:16:30	0.00	261.91	25.12	46.14	54.19
run2	6/10/2010	10:16:45	0.00	345.65	27.54	59.96	53.62
run2	6/10/2010	10:17:00	0.00	186.72	35.98	72.63	51.21
run2	6/10/2010	10:17:15	0.00	108.87	24.09	54.32	51.54
run2	6/10/2010	10:17:30	0.00	197.97	30.06	53.05	59.39
run2	6/10/2010	10:17:45	0.00	256.32	96.96	53.19	64.27
run2	6/10/2010	10:18:00	0.00	145.12	145.77	45.92	68.36
run2	6/10/2010	10:18:15	0.00	173.45	19.78	44.01	63.03
run2	6/10/2010	10:18:30	0.00	152.25	55.27	48.92	57.52
run2	6/10/2010	10:18:45	0.00	147.48	13.71	60.03	47.42
run2	6/10/2010	10:19:00	0.00	150.36	145.28	70.07	46.19
run2	6/10/2010	10:19:15	0.00	117.32	34.01	51.36	40.22
run2	6/10/2010	10:19:30	0.00	134.28	28.81	42.92	4.91
run2	6/10/2010	10:19:45	0.00	276.19	20.89	27.13	22.03
run2	6/10/2010	10:20:00	0.00	278.40	41.24	36.81	37.81
run2	6/10/2010	10:20:15	0.00	299.17	67.15	39.86	36.83
run2	6/10/2010	10:20:30	0.00	252.07	58.77	37.81	40.90
run2	6/10/2010	10:20:45	0.00	163.90	34.81	47.27	48.92
run2	6/10/2010	10:21:00	0.00	382.60	95.81	55.33	56.68
run2	6/10/2010	10:21:15	0.00	283.51	64.37	49.40	58.68
run2	6/10/2010	10:21:30	0.00	133.04	14.61	56.01	53.41
run2	6/10/2010	10:21:45	0.00	128.84	9.42	70.71	60.01
run2	6/10/2010	10:22:00	0.00	188.27	19.61	65.48	66.01
run2	6/10/2010	10:22:15	0.00	278.74	9.87	59.69	66.61
run2	6/10/2010	10:22:30	0.00	149.20	52.17	33.54	58.65
run2	6/10/2010	10:22:45	0.00	146.94	40.42	42.04	41.86
run2	6/10/2010	10:23:00	0.00	650.86	90.83	49.13	53.85
run2	6/10/2010	10:23:15	0.00	308.45	68.23	47.35	57.07
run2	6/10/2010	10:23:30	0.00	342.48	94.00	46.23	49.77
run2	6/10/2010	10:23:45	0.00	233.53	25.25	44.43	51.94
run2	6/10/2010	10:24:00	0.00	273.60	20.09	52.01	53.83
run2	6/10/2010	10:24:15	0.00	128.40	22.24	56.01	59.53
run2	6/10/2010	10:24:30	0.00	116.42	118.30	62.81	55.80
run2	6/10/2010	10:24:45	0.00	252.69	38.71	47.95	47.00
run2	6/10/2010	10:25:00	0.00	65.56	73.99	34.39	37.64
run2	6/10/2010	10:25:15	0.00	395.87	30.21	49.79	35.93
run2	6/10/2010	10:25:30	0.00	149.15	64.67	51.31	46.78

run2	6/10/2010	10:25:45	0.00	124.77	10.78	52.34	57.22			
run2	6/10/2010	10:26:00	0.00	124.09	6.70	65.90	65.80			
run2	6/10/2010	10:26:15	0.00	215.79	27.94	68.74	58.90			
run2	6/10/2010	10:26:30	0.00	178.94	21.98	52.98	63.30			
run2	6/10/2010	10:26:45	0.00	182.42	21.50	58.38	72.85			
run2	6/10/2010	10:27:00	0.00	341.37	31.42	63.23	58.93			
run2	6/10/2010	10:27:15	0.00	126.22	46.50	43.68	54.89			
run2	6/10/2010	10:27:30	0.00	154.70	48.49	45.70	62.81			
run2	6/10/2010	10:27:45	0.00	523.63	73.29	51.91	62.36			
run2	6/10/2010	10:28:00	0.00	191.90	14.75	72.21	61.95			
run2	6/10/2010	10:28:15	0.00	233.40	77.67	76.51	54.77			
run2	6/10/2010	10:28:30	0.00	160.87	60.65	60.04	52.96			
run2	6/10/2010	10:28:45	0.00	201.81	14.57	57.82	50.20			
run2	6/10/2010	10:29:00	0.00	168.46	10.32	55.97	64.24			
run2	6/10/2010	10:29:15	0.00	130.57	14.54	65.44	71.25			
run2	6/10/2010	10:29:30	0.00	85.24	50.44	62.92	81.60			
run2	6/10/2010	10:29:45	0.00	157.73	19.79	56.40	68.27			
run2	6/10/2010	10:30:00	0.00	141.93	8.01	65.68	56.18			
run2	6/10/2010	10:30:15	0.00	228.34	33.69	67.90	79.10			
run2	6/10/2010	10:30:30	0.00	295.36	38.29	58.96	71.58			
run2	6/10/2010	10:30:45	0.00	141.47	19.23	60.95	53.41			
run2	6/10/2010	10:31:00	0.00	188.98	25.38	62.81	70.65			
run2	6/10/2010	10:31:15	0.00	182.03	13.93	75.67	73.23			
run2	6/10/2010	10:31:30	0.00	101.84	77.85	66.78	50.20			
run2	6/10/2010	10:31:45	0.00	94.76	45.11	48.28	51.47			
run2	6/10/2010	10:32:00	0.00	128.43	31.98	49.38	52.55			
run2	6/10/2010	10:32:15	0.00	180.00	11.53	50.80	73.46			
run2	6/10/2010	10:32:30	0.00	152.30	22.58	56.40	50.57			
run2	6/10/2010	10:32:45	0.00	115.58	17.53	41.84	0.43			
run2	6/10/2010	10:33:00	0.00	102.56	14.35	28.63	34.61			
run2	6/10/2010	10:33:15	0.00	149.22	18.03	46.98	51.34			
run2	6/10/2010	10:33:30	0.00	111.00	45.79	51.71	74.98			
run2	6/10/2010	10:33:45	0.00	94.61	48.44	59.39	51.44			
run2	6/10/2010	10:34:00	0.00	332.41	77.28	35.89	31.83			
run2	6/10/2010	10:34:15	0.00	291.75	19.10	29.71	33.01			
run2	6/10/2010	10:34:30	0.00	99.59	21.81	43.58	42.55			
run2	6/10/2010	10:34:45	0.00	224.50	31.03	52.01	60.24			
run2	6/10/2010	10:35:00	0.00	143.31	29.92	59.39	64.87			
run2	6/10/2010	10:35:15	0.00	361.23	64.93	47.18	63.83			
run2	6/10/2010	10:35:30	0.00	257.49	36.44	50.80	47.00			
run2	6/10/2010	10:35:45	0.00	309.65	91.25	60.46	49.80			
run2	6/10/2010	10:36:00	0.00	312.91	34.97	63.76	52.34			
run2	6/10/2010	10:36:15	0.00	206.56	41.80	63.85	47.30			
run2	6/10/2010	10:36:30	0.00	121.84	99.20	56.18	45.83			
run2	6/10/2010	10:36:45	0.00	85.12	14.46	64.27	43.37			
run2	6/10/2010	10:37:00	0.00	255.18	35.59	70.92	53.61			
run2	6/10/2010	10:37:15	0.00	185.89	62.70	49.22	56.94			
run2	6/10/2010	10:37:30	0.00	140.46	14.96	52.49	54.69			
run2	6/10/2010	10:37:45	0.00	147.58	43.96	62.16	54.25			
run2	6/10/2010	10:38:00	0.00	194.09	18.46	66.79	53.83			
run2	6/10/2010	10:38:15	0.00	144.74	17.07	68.17	55.88			
run2	6/10/2010	10:38:30	0.00	128.70	70.09	65.58	58.41			
run2	6/10/2010	10:38:45	0.00	482.47	44.49	62.14	63.45			
run2	6/10/2010	10:39:00	0.00	294.34	44.52	58.96	69.70			
run2	6/10/2010	10:39:15	0.00	179.44	15.44	58.16	70.35			
run2	6/10/2010	10:39:30	0.00	83.58	36.03	60.01	60.24			
run2	6/10/2010	10:39:45	0.00	123.68	21.11	64.09	63.85			
run2	6/10/2010	10:40:00	0.00	150.46	25.69	39.28	66.86			
run2	6/10/2010	10:40:15	0.00	179.83	32.89	30.93	38.31			
run2	6/10/2010	10:40:30	0.00	108.06	58.60	35.68	38.84			
run2	6/10/2010	10:40:45	0.00	202.39	10.32	53.53	44.65			
run2	6/10/2010	10:41:00	0.00	127.57	59.05	69.64	50.05			
run2	6/10/2010	10:41:15	0.00	108.76	75.66	53.15	51.84			
run2	6/10/2010	10:41:30	0.00	126.45	25.71	50.17	49.99			
run2	6/10/2010	10:41:45	0.00	93.83	71.90	45.72	46.10			
run2	6/10/2010	10:42:00	0.00	66.81	62.42	46.81	42.51			
run2	6/10/2010	10:42:15	0.00	183.53	19.04	47.54	53.88			
run2	6/10/2010	10:42:30	0.00	539.05	57.91	49.77	56.30			
run2	6/10/2010	10:42:45	0.00	223.67	27.85	49.77	59.39			
run2	6/10/2010	10:43:00	0.00	215.64	17.68	49.77	56.15			
run2	6/10/2010	10:43:15	0.00	322.88	20.61	79.72	54.59			
run2	6/10/2010	10:43:30	0.00	278.57	33.77	76.09	52.77			
run2	6/10/2010	10:43:45	0.00	364.14	35.67	63.45	54.46			
run2	6/10/2010	10:44:00	0.00	223.62	7.81	80.86	55.97			
run2	6/10/2010	10:44:15	0.00	212.21	38.18	83.20	51.31			
run2	6/10/2010	10:44:30	0.00	171.47	20.89	53.19	54.77			
run2	6/10/2010	10:44:45	0.00	124.11	16.27	54.73	62.59			
run2	6/10/2010	10:45:00	0.00	168.56	39.86	55.97	43.86			
run2	6/10/2010	10:45:15	0.00	201.56	68.50	48.08	38.07			
run2	6/10/2010	10:45:30	0.00	140.06	26.60	49.92	44.43			
averun2	6/10/2010	9:43:45	0.00	204.47	39.58	56.79	56.52	60		
scg2	6/10/2010	10:46:15	0.00	315.82	33.00	65.06	72.29	AAL20118/cg2	O2	20.38
scg2	6/10/2010	10:46:30	10.34	167.32	17.70	88.65	44.05	AAL20118/cg2	O2	20.38
scg2	6/10/2010	10:46:45	19.68	1.55	0.80	36.29	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	10:47:00	19.90	0.29	0.51	0.00	0.00	AAL20118/cg2	O2	20.38

scg2	6/10/2010	10:47:15	19.98	0.07	0.31	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	10:47:30	20.03	0.00	0.24	0.00	0.00	AAL20118/cg2	O2	20.38
thczero1	6/10/2010	10:47:15	19.98	0.07	0.31	0.00	0.00	AAL20118/cg2	O2	20.38
scg3	6/10/2010	10:48:00	15.91	31.36	2.60	30.42	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	10:48:15	10.45	6.74	11.89	30.85	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	10:48:30	10.92	0.00	0.25	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	10:48:45	10.89	0.00	0.09	0.00	0.00	AAL1885/cg3	O2	11
o2span1	6/10/2010	10:48:30	10.92	0.00	0.25	0.00	0.00	AAL1885/cg3	O2	11
cozero1	6/10/2010	10:48:30	10.92	0.00	0.25	0.00	0.00	AAL1885/cg3	O2	11
noxzero1	6/10/2010	10:48:30	10.92	0.00	0.25	0.00	0.00	AAL1885/cg3	O2	11
sdg22	6/10/2010	10:49:15	6.17	143.29	3.34	29.78	18.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:49:30	0.63	129.74	41.36	58.96	66.22	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:49:45	1.52	5.06	2.56	93.35	22.77	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:50:00	0.08	0.00	0.24	395.49	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:50:15	0.04	0.00	0.12	434.95	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:50:30	0.01	0.00	0.06	438.14	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:50:45	0.00	0.00	0.04	440.46	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:51:00	0.00	0.00	0.02	441.79	0.37	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:51:15	0.00	0.00	0.00	445.60	0.48	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:51:30	0.00	0.00	0.02	447.31	0.64	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:51:45	0.00	0.00	0.10	449.25	0.78	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:52:00	0.00	0.00	0.10	460.77	0.85	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:52:15	0.00	0.00	0.10	463.62	0.85	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:52:30	0.00	0.00	0.10	466.13	0.85	CC45857/dg22	THC	471.2
sdg22	6/10/2010	10:52:45	0.00	0.00	0.07	468.66	0.85	CC45857/dg22	THC	471.2
thcspan1	6/10/2010	10:52:30	0.00	0.00	0.10	466.13	0.85	CC45857/dg22	THC	471.2
sdg15	6/10/2010	10:53:30	0.00	245.02	18.46	337.14	64.94	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:53:45	0.00	40.63	10.39	192.69	21.06	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:54:00	0.00	2.10	0.34	114.66	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:54:15	0.00	171.05	0.20	72.75	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:54:30	0.00	210.16	0.18	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:54:45	0.00	214.52	0.10	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:55:00	0.00	217.06	0.10	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:55:15	0.00	218.44	0.09	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:55:30	0.00	219.53	0.08	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:55:45	0.00	221.37	0.07	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:56:00	0.00	233.46	0.06	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	10:56:15	0.00	234.98	0.06	0.00	0.00	XC029811B/dg15	CO	233.1
o2zero1	6/10/2010	10:56:00	0.00	233.46	0.06	0.00	0.00	XC029811B/dg15	CO	233.1
cospan1	6/10/2010	10:56:00	0.00	233.46	0.06	0.00	0.00	XC029811B/dg15	CO	233.1
sdg4	6/10/2010	10:57:00	0.00	245.36	66.67	58.53	48.04	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:57:15	0.00	365.48	7.45	0.06	40.10	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:57:30	0.00	127.60	55.42	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:57:45	0.00	103.58	77.63	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:58:00	0.00	103.53	99.24	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:58:15	0.00	103.81	101.48	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:58:30	0.00	103.71	101.67	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:58:45	0.00	103.58	101.89	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:59:00	0.00	103.50	102.11	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:59:15	0.00	96.26	95.76	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:59:30	0.00	92.69	84.13	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	10:59:45	0.00	93.59	84.25	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	11:00:00	0.00	94.26	88.33	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	11:00:15	0.00	95.20	89.58	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	11:00:30	0.00	95.98	90.51	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	11:00:45	0.00	96.50	91.49	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	11:01:00	0.00	97.09	92.32	0.00	0.00	ALM013796/dg4	NOx	96
o2zero1	6/10/2010	11:01:00	0.00	97.09	92.32	0.00	0.00	ALM013796/dg4	NOx	96
noxspan1	6/10/2010	11:00:45	0.00	96.50	92.32	0.00	0.00	ALM013796/dg4	NOx	96
run3	6/10/2010	11:03:15	0.00	297.67	78.22	58.11	66.18			
run3	6/10/2010	11:03:30	0.00	246.89	85.76	59.74	69.43			
run3	6/10/2010	11:03:45	0.00	180.79	64.78	61.74	61.03			
run3	6/10/2010	11:04:00	0.00	106.98	38.84	56.11	57.18			
run3	6/10/2010	11:04:15	0.00	102.59	45.91	54.27	66.00			
run3	6/10/2010	11:04:30	0.00	406.95	69.08	51.27	61.75			
run3	6/10/2010	11:04:45	0.00	196.63	16.21	58.19	57.04			
run3	6/10/2010	11:05:00	0.00	194.92	16.25	60.68	76.12			
run3	6/10/2010	11:05:15	0.00	116.59	31.47	47.01	78.71			
run3	6/10/2010	11:05:30	0.00	123.26	19.37	49.28	77.33			
run3	6/10/2010	11:05:45	0.00	280.26	78.28	51.91	61.72			
run3	6/10/2010	11:06:00	0.00	128.27	28.37	65.73	54.92			
run3	6/10/2010	11:06:15	0.00	162.27	9.67	70.18	69.64			
run3	6/10/2010	11:06:30	0.00	131.35	8.98	76.05	67.78			
run3	6/10/2010	11:06:45	0.00	179.48	7.26	72.70	65.58			
run3	6/10/2010	11:07:00	0.00	227.83	18.76	71.07	90.31			
run3	6/10/2010	11:07:15	0.00	283.53	24.76	69.86	85.12			
run3	6/10/2010	11:07:30	0.00	280.05	6.86	81.97	60.03			
run3	6/10/2010	11:07:45	0.00	245.59	31.79	94.85	56.75			
run3	6/10/2010	11:08:00	0.00	150.64	24.69	62.96	55.41			
run3	6/10/2010	11:08:15	0.00	107.99	14.77	59.70	60.46			
run3	6/10/2010	11:08:30	0.00	267.64	42.33	64.94	63.40			
run3	6/10/2010	11:08:45	0.00	421.19	25.23	65.08	66.86			
run3	6/10/2010	11:09:00	0.00	232.49	13.07	65.63	62.16			
run3	6/10/2010	11:09:15	0.00	119.81	62.79	71.76	60.03			
run3	6/10/2010	11:09:30	0.00	129.31	14.58	70.11	55.76			

run3	6/10/2010	11:09:45	0.00	129.17	3.14	68.15	77.09
run3	6/10/2010	11:10:00	0.00	111.31	6.18	78.14	87.20
run3	6/10/2010	11:10:15	0.00	178.53	16.00	74.70	91.43
run3	6/10/2010	11:10:30	0.00	398.84	100.23	60.03	67.66
run3	6/10/2010	11:10:45	0.00	233.17	66.49	20.39	41.66
run3	6/10/2010	11:11:00	0.00	136.72	15.14	4.26	23.73
run3	6/10/2010	11:11:15	0.00	153.66	12.04	47.14	27.59
run3	6/10/2010	11:11:30	0.00	177.21	57.24	48.19	45.72
run3	6/10/2010	11:11:45	0.00	246.01	40.90	49.35	47.27
run3	6/10/2010	11:12:00	0.00	255.13	59.18	46.51	48.49
run3	6/10/2010	11:12:15	0.00	284.80	35.65	43.98	54.26
run3	6/10/2010	11:12:30	0.00	128.27	37.42	37.81	47.65
run3	6/10/2010	11:12:45	0.00	93.23	40.36	38.68	39.73
run3	6/10/2010	11:13:00	0.00	157.28	9.99	39.75	53.35
run3	6/10/2010	11:13:15	0.00	70.28	52.48	50.40	55.43
run3	6/10/2010	11:13:30	0.00	117.48	17.81	53.51	55.12
run3	6/10/2010	11:13:45	0.00	371.09	51.91	57.04	56.97
run3	6/10/2010	11:14:00	0.00	344.01	31.32	68.74	56.75
run3	6/10/2010	11:14:15	0.00	337.29	70.55	63.46	44.66
run3	6/10/2010	11:14:30	0.00	318.29	117.10	43.58	46.11
run3	6/10/2010	11:14:45	0.00	119.17	101.70	47.65	47.85
run3	6/10/2010	11:15:00	0.00	473.32	60.59	50.32	54.79
run3	6/10/2010	11:15:15	0.00	343.60	12.15	57.68	52.64
run3	6/10/2010	11:15:30	0.00	177.93	63.30	53.14	43.58
run3	6/10/2010	11:15:45	0.00	84.73	60.74	48.07	51.40
run3	6/10/2010	11:16:00	0.00	88.59	79.57	38.32	54.22
run3	6/10/2010	11:16:15	0.00	171.84	38.49	39.89	39.12
run3	6/10/2010	11:16:30	0.00	75.10	49.91	47.84	41.67
run3	6/10/2010	11:16:45	0.00	201.82	19.51	58.39	44.65
run3	6/10/2010	11:17:00	0.00	570.07	35.21	63.22	61.81
run3	6/10/2010	11:17:15	0.00	303.58	31.57	55.97	64.16
run3	6/10/2010	11:17:30	0.00	388.72	36.02	58.90	62.59
run3	6/10/2010	11:17:45	0.00	267.11	24.00	62.38	60.84
run3	6/10/2010	11:18:00	0.00	163.02	23.68	55.30	60.00
run3	6/10/2010	11:18:15	0.00	218.28	28.42	55.56	59.40
run3	6/10/2010	11:18:30	0.00	267.50	60.83	59.39	55.90
run3	6/10/2010	11:18:45	0.00	134.23	25.22	55.29	52.12
run3	6/10/2010	11:19:00	0.00	266.94	22.27	54.39	54.70
run3	6/10/2010	11:19:15	0.00	232.98	11.64	74.95	56.80
run3	6/10/2010	11:19:30	0.00	184.82	15.70	69.00	61.10
run3	6/10/2010	11:19:45	0.00	86.62	16.02	61.95	68.97
run3	6/10/2010	11:20:00	0.00	299.63	14.88	82.73	73.43
run3	6/10/2010	11:20:15	0.00	265.06	19.34	77.10	77.75
run3	6/10/2010	11:20:30	0.00	180.65	27.64	53.19	63.46
run3	6/10/2010	11:20:45	0.00	147.09	19.63	42.63	46.36
run3	6/10/2010	11:21:00	0.00	113.82	14.33	38.52	65.85
run3	6/10/2010	11:21:15	0.00	108.58	33.08	50.14	67.96
run3	6/10/2010	11:21:30	0.00	176.94	11.59	56.30	65.58
run3	6/10/2010	11:21:45	0.00	78.17	9.92	63.02	65.00
run3	6/10/2010	11:22:00	0.00	298.34	23.86	82.25	64.30
run3	6/10/2010	11:22:15	0.00	303.35	35.00	74.67	59.42
run3	6/10/2010	11:22:30	0.00	250.03	61.32	46.78	53.41
run3	6/10/2010	11:22:45	0.00	201.90	39.45	51.40	46.36
run3	6/10/2010	11:23:00	0.00	196.81	40.16	54.40	58.69
run3	6/10/2010	11:23:15	0.00	148.73	14.61	61.95	62.69
run3	6/10/2010	11:23:30	0.00	229.38	52.61	58.75	69.64
run3	6/10/2010	11:23:45	0.00	226.56	61.60	54.90	68.79
run3	6/10/2010	11:24:00	0.00	195.30	94.46	55.63	66.81
run3	6/10/2010	11:24:15	0.00	307.45	60.96	51.95	41.67
run3	6/10/2010	11:24:30	0.00	185.09	12.05	42.51	50.14
run3	6/10/2010	11:24:45	0.00	180.53	35.78	46.00	59.60
run3	6/10/2010	11:25:00	0.00	188.69	53.56	49.09	61.07
run3	6/10/2010	11:25:15	0.00	216.11	75.34	62.15	60.10
run3	6/10/2010	11:25:30	0.00	201.86	62.17	62.95	56.82
run3	6/10/2010	11:25:45	0.00	338.01	68.87	63.87	55.43
run3	6/10/2010	11:26:00	0.00	198.89	37.79	53.34	54.77
run3	6/10/2010	11:26:15	0.00	172.77	18.41	53.41	55.97
run3	6/10/2010	11:26:30	0.00	243.38	62.11	57.68	58.02
run3	6/10/2010	11:26:45	0.00	169.55	10.50	45.45	60.24
run3	6/10/2010	11:27:00	0.00	254.96	9.19	40.26	60.06
run3	6/10/2010	11:27:15	0.00	378.11	29.94	52.54	51.17
run3	6/10/2010	11:27:30	0.00	235.04	45.16	54.83	28.84
run3	6/10/2010	11:27:45	0.00	444.14	64.99	57.47	45.16
run3	6/10/2010	11:28:00	0.00	202.83	27.11	60.57	54.67
run3	6/10/2010	11:28:15	0.00	86.04	112.11	63.97	66.86
run3	6/10/2010	11:28:30	0.00	478.74	24.05	71.99	65.61
run3	6/10/2010	11:28:45	0.00	427.88	26.69	59.47	64.10
run3	6/10/2010	11:29:00	0.00	214.03	23.47	53.78	59.79
run3	6/10/2010	11:29:15	0.00	227.91	31.93	56.18	59.44
run3	6/10/2010	11:29:30	0.00	302.95	41.41	57.42	60.24
run3	6/10/2010	11:29:45	0.00	231.20	42.86	58.75	56.53
run3	6/10/2010	11:30:00	0.00	158.17	37.71	57.27	55.07
run3	6/10/2010	11:30:15	0.00	162.94	8.27	59.69	61.52
run3	6/10/2010	11:30:30	0.00	201.82	25.83	66.44	49.22
run3	6/10/2010	11:30:45	0.00	239.45	43.05	43.98	34.75

run3	6/10/2010	11:31:00	0.00	165.37	65.79	32.98	36.93
run3	6/10/2010	11:31:15	0.00	44.01	32.75	41.44	41.64
run3	6/10/2010	11:31:30	0.00	165.41	28.45	60.97	54.47
run3	6/10/2010	11:31:45	0.00	138.38	129.10	84.38	53.73
run3	6/10/2010	11:32:00	0.00	137.73	72.33	66.12	52.37
run3	6/10/2010	11:32:15	0.00	132.26	92.12	61.21	35.70
run3	6/10/2010	11:32:30	0.00	117.38	49.71	54.69	46.60
run3	6/10/2010	11:32:45	0.00	199.27	58.00	47.60	58.53
run3	6/10/2010	11:33:00	0.00	293.28	24.15	45.13	51.40
run3	6/10/2010	11:33:15	0.00	127.96	64.72	56.17	50.73
run3	6/10/2010	11:33:30	0.00	130.71	60.50	54.82	52.12
run3	6/10/2010	11:33:45	0.00	140.58	50.95	53.19	51.55
run3	6/10/2010	11:34:00	0.00	145.61	35.35	46.36	53.09
run3	6/10/2010	11:34:15	0.00	360.68	11.81	54.08	78.17
run3	6/10/2010	11:34:30	0.00	203.52	9.45	79.04	71.38
run3	6/10/2010	11:34:45	0.00	424.59	20.05	74.94	63.23
run3	6/10/2010	11:35:00	0.00	200.64	20.22	71.27	67.68
run3	6/10/2010	11:35:15	0.00	161.48	111.07	42.54	65.67
run3	6/10/2010	11:35:30	0.00	351.64	31.39	51.40	59.17
run3	6/10/2010	11:35:45	0.00	273.73	26.39	61.52	61.01
run3	6/10/2010	11:36:00	0.00	217.25	16.05	73.42	63.39
run3	6/10/2010	11:36:15	0.00	513.38	31.33	73.17	78.40
run3	6/10/2010	11:36:30	0.00	225.85	10.32	67.29	72.25
run3	6/10/2010	11:36:45	0.00	83.17	23.98	68.67	64.94
run3	6/10/2010	11:37:00	0.00	132.02	79.74	68.76	64.23
run3	6/10/2010	11:37:15	0.00	259.00	62.71	59.39	64.20
run3	6/10/2010	11:37:30	0.00	280.89	32.51	59.60	64.43
run3	6/10/2010	11:37:45	0.00	327.67	23.38	59.81	66.67
run3	6/10/2010	11:38:00	0.00	192.46	18.50	17.80	65.90
run3	6/10/2010	11:38:15	0.00	256.61	16.23	20.10	36.34
run3	6/10/2010	11:38:30	0.00	159.33	40.54	42.73	50.67
run3	6/10/2010	11:38:45	0.00	95.13	102.41	42.58	67.08
run3	6/10/2010	11:39:00	0.00	141.55	7.43	44.48	63.96
run3	6/10/2010	11:39:15	0.00	101.77	18.37	65.57	63.85
run3	6/10/2010	11:39:30	0.00	206.01	18.07	61.99	64.94
run3	6/10/2010	11:39:45	0.00	168.47	103.31	57.68	52.81
run3	6/10/2010	11:40:00	0.00	461.13	25.63	60.31	49.42
run3	6/10/2010	11:40:15	0.00	291.00	43.42	58.25	80.52
run3	6/10/2010	11:40:30	0.00	207.15	39.43	51.27	75.58
run3	6/10/2010	11:40:45	0.00	196.42	133.16	50.12	70.28
run3	6/10/2010	11:41:00	0.00	246.13	48.26	47.50	58.53
run3	6/10/2010	11:41:15	0.00	73.21	143.71	13.06	48.61
run3	6/10/2010	11:41:30	0.00	122.18	38.95	24.13	28.41
run3	6/10/2010	11:41:45	0.00	305.93	12.38	37.17	40.87
run3	6/10/2010	11:42:00	0.00	207.18	37.07	34.37	47.71
run3	6/10/2010	11:42:15	0.00	168.00	19.53	34.86	51.06
run3	6/10/2010	11:42:30	0.00	113.66	26.01	37.38	54.65
run3	6/10/2010	11:42:45	0.00	156.98	43.52	44.53	58.96
run3	6/10/2010	11:43:00	0.00	130.97	13.77	48.71	50.60
run3	6/10/2010	11:43:15	0.00	166.57	7.78	62.15	49.96
run3	6/10/2010	11:43:30	0.00	150.90	27.99	61.45	51.70
run3	6/10/2010	11:43:45	0.00	190.95	12.64	60.67	62.46
run3	6/10/2010	11:44:00	0.00	98.36	37.51	79.18	65.70
run3	6/10/2010	11:44:15	0.00	165.87	67.83	81.18	43.61
run3	6/10/2010	11:44:30	0.00	305.91	23.81	78.40	48.19
run3	6/10/2010	11:44:45	0.00	140.95	48.14	59.17	53.62
run3	6/10/2010	11:45:00	0.00	114.23	15.11	50.27	55.53
run3	6/10/2010	11:45:15	0.00	195.35	29.04	65.80	59.44
run3	6/10/2010	11:45:30	0.00	108.33	82.56	45.27	70.07
run3	6/10/2010	11:45:45	0.00	174.15	25.54	23.29	61.01
run3	6/10/2010	11:46:00	0.00	176.69	52.47	40.32	56.80
run3	6/10/2010	11:46:15	0.00	259.98	39.93	43.49	56.18
run3	6/10/2010	11:46:30	0.00	142.89	71.43	44.86	51.10
run3	6/10/2010	11:46:45	0.00	186.75	49.21	52.47	45.50
run3	6/10/2010	11:47:00	0.00	115.66	124.51	55.84	50.83
run3	6/10/2010	11:47:15	0.00	217.51	21.35	50.20	55.06
run3	6/10/2010	11:47:30	0.00	107.72	19.47	55.57	64.09
run3	6/10/2010	11:47:45	0.00	71.70	69.94	61.95	52.05
run3	6/10/2010	11:48:00	0.00	197.32	70.64	45.96	47.33
run3	6/10/2010	11:48:15	0.00	227.05	25.81	46.50	70.27
run3	6/10/2010	11:48:30	0.00	265.54	34.80	54.26	61.91
run3	6/10/2010	11:48:45	0.00	280.00	52.24	49.92	52.77
run3	6/10/2010	11:49:00	0.00	219.35	29.39	47.03	34.41
run3	6/10/2010	11:49:15	0.00	252.64	38.35	33.55	33.94
run3	6/10/2010	11:49:30	0.00	170.52	14.23	42.73	40.16
run3	6/10/2010	11:49:45	0.00	303.65	26.46	53.19	49.45
run3	6/10/2010	11:50:00	0.00	122.58	33.40	53.19	54.50
run3	6/10/2010	11:50:15	0.00	102.52	71.81	53.49	57.25
run3	6/10/2010	11:50:30	0.00	230.23	18.36	54.26	57.85
run3	6/10/2010	11:50:45	0.00	314.06	37.88	55.73	58.53
run3	6/10/2010	11:51:00	0.00	103.42	31.13	57.58	50.49
run3	6/10/2010	11:51:15	0.00	128.94	9.24	76.04	54.84
run3	6/10/2010	11:51:30	0.00	71.53	5.89	74.08	70.71
run3	6/10/2010	11:51:45	0.00	100.67	45.28	71.99	56.68
run3	6/10/2010	11:52:00	0.00	250.42	18.23	78.78	49.77

run3	6/10/2010	11:52:15	0.00	139.03	42.07	77.94	49.77			
run3	6/10/2010	11:52:30	0.00	372.77	23.40	73.06	58.73			
run3	6/10/2010	11:52:45	0.00	272.66	53.45	59.42	69.21			
run3	6/10/2010	11:53:00	0.00	201.60	25.79	52.64	60.68			
run3	6/10/2010	11:53:15	0.00	135.87	102.14	56.18	59.02			
run3	6/10/2010	11:53:30	0.00	162.09	45.91	58.33	57.25			
run3	6/10/2010	11:53:45	0.00	179.28	20.45	60.88	37.47			
run3	6/10/2010	11:54:00	0.00	129.22	67.05	28.00	28.74			
run3	6/10/2010	11:54:15	0.00	128.21	29.39	28.63	33.97			
run3	6/10/2010	11:54:30	0.00	85.84	113.54	44.86	36.79			
run3	6/10/2010	11:54:45	0.00	144.81	5.62	54.53	39.95			
run3	6/10/2010	11:55:00	0.00	59.03	33.12	58.83	68.16			
run3	6/10/2010	11:55:15	0.00	146.91	110.76	52.99	63.63			
run3	6/10/2010	11:55:30	0.00	140.27	46.55	51.11	39.35			
run3	6/10/2010	11:55:45	0.00	121.11	9.66	48.92	58.59			
run3	6/10/2010	11:56:00	0.00	181.36	5.68	90.55	67.61			
run3	6/10/2010	11:56:15	0.00	161.07	26.81	91.82	52.14			
run3	6/10/2010	11:56:30	0.00	98.28	24.22	80.75	55.71			
run3	6/10/2010	11:56:45	0.00	109.46	5.06	82.64	60.03			
run3	6/10/2010	11:57:00	0.00	92.59	14.82	81.53	58.65			
run3	6/10/2010	11:57:15	0.00	108.42	32.62	49.38	60.10			
run3	6/10/2010	11:57:30	0.00	221.16	22.73	55.36	64.10			
run3	6/10/2010	11:57:45	0.00	196.16	49.67	62.16	58.22			
run3	6/10/2010	11:58:00	0.00	77.87	86.51	50.29	56.11			
run3	6/10/2010	11:58:15	0.00	122.02	9.46	55.29	66.22			
run3	6/10/2010	11:58:30	0.00	93.77	9.77	72.21	68.56			
run3	6/10/2010	11:58:45	0.00	167.07	21.49	68.42	71.35			
run3	6/10/2010	11:59:00	0.00	143.59	27.37	66.24	69.47			
run3	6/10/2010	11:59:15	0.00	338.66	43.68	63.25	67.11			
run3	6/10/2010	11:59:30	0.00	113.41	28.97	56.45	61.10			
run3	6/10/2010	11:59:45	0.00	200.33	14.46	49.13	67.29			
run3	6/10/2010	12:00:00	0.00	265.54	16.34	70.41	70.50			
run3	6/10/2010	12:00:15	0.00	208.98	13.44	57.00	73.91			
run3	6/10/2010	12:00:30	0.00	161.13	29.29	15.59	55.96			
run3	6/10/2010	12:00:45	0.00	113.70	71.04	29.95	35.46			
run3	6/10/2010	12:01:00	0.00	146.99	8.53	38.82	57.74			
run3	6/10/2010	12:01:15	0.00	245.25	29.71	55.10	59.15			
run3	6/10/2010	12:01:30	0.00	131.69	11.27	58.83	52.55			
run3	6/10/2010	12:01:45	0.00	162.92	42.26	63.23	49.19			
run3	6/10/2010	12:02:00	0.00	155.73	22.45	58.18	49.11			
run3	6/10/2010	12:02:15	0.00	197.38	12.31	62.89	72.18			
run3	6/10/2010	12:02:30	0.00	118.41	43.82	78.61	65.64			
run3	6/10/2010	12:02:45	0.00	127.18	79.26	77.18	58.53			
run3	6/10/2010	12:03:00	0.00	171.22	106.57	75.25	53.41			
run3	6/10/2010	12:03:15	0.00	111.33	34.62	54.70	55.43			
run3	6/10/2010	12:03:30	0.00	108.32	95.91	51.24	62.59			
run3	6/10/2010	12:03:45	0.00	176.76	68.03	47.21	54.84			
run3	6/10/2010	12:04:00	0.00	156.89	12.38	34.96	50.77			
run3	6/10/2010	12:04:15	0.00	173.91	12.46	41.23	49.99			
run3	6/10/2010	12:04:30	0.00	236.48	15.48	63.87	54.18			
run3	6/10/2010	12:04:45	0.00	211.39	5.58	74.74	59.17			
averun3	6/10/2010	11:05:00	0.00	198.02	38.74	56.31	57.21	60		
sdg4	6/10/2010	12:05:15	0.00	80.86	91.32	41.26	49.36	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:05:30	0.08	100.34	58.71	21.45	20.72	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:05:45	0.00	92.97	86.91	0.00	6.91	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:06:00	0.00	95.02	89.53	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:06:15	0.00	96.96	91.40	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:06:30	0.00	98.32	93.04	0.00	0.00	ALM013796/dg4	NOx	96
sdg4	6/10/2010	12:06:45	0.00	98.98	93.59	0.00	0.00	ALM013796/dg4	NOx	96
o2zero1	6/10/2010	12:06:45	0.00	98.98	93.59	0.00	0.00	ALM013796/dg4	NOx	96
noxspan1	6/10/2010	12:06:45	0.00	98.98	93.59	0.00	0.00	ALM013796/dg4	NOx	96
sdg15	6/10/2010	12:07:15	0.00	99.06	90.03	0.00	15.67	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:07:30	0.00	58.51	64.20	0.00	60.84	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:07:45	0.00	40.53	41.58	0.00	19.31	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:08:00	0.00	139.00	26.49	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:08:15	0.00	217.99	1.99	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:08:30	0.00	223.06	1.11	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:08:45	0.00	226.07	0.84	0.00	0.00	XC029811B/dg15	CO	233.1
sdg15	6/10/2010	12:09:00	0.00	228.50	0.67	0.00	0.00	XC029811B/dg15	CO	233.1
o2zero1	6/10/2010	12:09:15	0.00	230.13	0.53	0.00	0.00	XC029811B/dg15	CO	233.1
cospan1	6/10/2010	12:09:15	0.00	230.13	0.53	0.00	0.00	XC029811B/dg15	CO	233.1
scg3	6/10/2010	12:09:30	0.00	230.52	0.47	10.64	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	12:09:45	0.16	232.63	1.53	23.29	48.27	AAL1885/cg3	O2	11
scg3	6/10/2010	12:10:00	9.05	29.77	0.68	2.72	68.86	AAL1885/cg3	O2	11
scg3	6/10/2010	12:10:15	10.63	0.67	0.17	0.00	0.04	AAL1885/cg3	O2	11
scg3	6/10/2010	12:10:30	10.71	0.00	0.10	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	12:10:45	10.75	0.00	0.06	0.00	0.00	AAL1885/cg3	O2	11
scg3	6/10/2010	12:11:00	10.77	0.00	0.04	0.00	0.00	AAL1885/cg3	O2	11
o2span1	6/10/2010	12:10:45	10.75	0.00	0.06	0.00	0.00	AAL1885/cg3	O2	11
cozero1	6/10/2010	12:10:45	10.75	0.00	0.06	0.00	0.00	AAL1885/cg3	O2	11
noxzero1	6/10/2010	12:10:45	10.75	0.00	0.06	0.00	0.00	AAL1885/cg3	O2	11
sdg22	6/10/2010	12:11:15	10.78	0.00	0.01	0.00	4.93	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:11:30	5.25	72.79	20.15	1.28	17.30	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:11:45	0.99	323.37	17.03	2.78	5.90	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:12:00	0.06	1.66	0.32	427.63	0.00	CC45857/dg22	THC	471.2

sdg22	6/10/2010	12:12:15	0.02	0.00	0.12	484.61	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:12:30	0.00	0.00	0.10	491.33	0.20	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:12:45	0.00	0.00	0.07	494.31	0.43	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:13:00	0.00	0.00	0.02	495.48	0.61	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:13:15	0.00	0.00	0.00	493.68	0.70	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:13:30	0.00	0.00	0.00	494.28	0.87	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:13:45	0.00	0.00	0.00	494.97	1.14	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:14:00	0.00	0.00	0.00	498.07	1.28	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:14:15	0.00	0.00	0.00	497.54	1.28	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:14:30	0.00	0.00	0.00	494.97	1.28	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:14:45	0.00	0.00	0.00	497.50	1.28	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:15:00	0.00	0.00	0.00	497.71	1.28	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:15:15	0.00	0.00	0.00	484.53	1.18	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:15:30	0.00	0.00	0.00	487.90	0.85	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:15:45	0.00	0.00	0.00	491.97	0.85	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:16:00	0.00	0.00	0.00	498.47	0.84	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:16:15	0.00	0.00	0.00	501.60	0.64	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:16:30	0.00	0.00	0.00	507.14	0.34	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:16:45	0.00	0.00	0.00	499.19	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:17:00	0.00	0.00	0.00	495.88	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:17:15	0.00	0.00	0.00	502.44	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:17:30	0.00	0.00	0.00	502.74	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:17:45	0.00	0.00	0.00	503.08	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:18:00	0.00	0.00	0.00	516.19	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:18:15	0.00	0.00	0.00	521.58	0.00	CC45857/dg22	THC	471.2
sdg22	6/10/2010	12:18:30	0.00	0.00	0.00	532.35	0.00	CC45857/dg22	THC	471.2
thcspan1	6/10/2010	12:15:15	0.00	0.00	0.00	484.53	1.18	CC45857/dg22	THC	471.2
scg2	6/10/2010	12:18:45	0.00	0.00	0.00	530.31	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:19:00	3.80	86.28	24.70	498.64	38.88	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:19:15	19.14	1.38	2.98	0.43	32.56	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:19:30	19.82	0.00	0.08	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:19:45	19.93	0.00	0.01	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:20:00	20.00	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:20:15	20.05	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:20:30	20.09	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:20:45	20.11	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
scg2	6/10/2010	12:21:00	20.13	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
thczero1	6/10/2010	12:20:45	20.11	0.00	0.00	0.00	0.00	AAL20118/cg2	O2	20.38
scg8	6/10/2010	12:34:45	18.74	29.67	27.14	0.20	0.00	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:35:00	20.62	0.00	97.03	1.57	1.11	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:35:15	20.66	0.00	98.55	26.05	1.13	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:35:30	20.68	0.00	99.37	17.35	0.64	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:35:45	20.67	0.00	100.13	7.90	0.20	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:36:00	20.68	0.00	100.43	21.11	0.00	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:36:15	20.68	0.00	100.71	16.96	0.00	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:36:30	20.68	0.00	100.95	1.07	0.00	ALM050638/cg8	NOx	101
scg8	6/10/2010	12:36:45	20.68	0.00	101.19	1.64	0.00	ALM050638/cg8	NOx	101
sdg28	6/10/2010	12:37:30	15.98	23.39	3.32	4.37	0.21	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:37:45	10.73	95.39	1.49	3.42	1.25	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:38:00	8.85	516.57	0.73	1.18	1.62	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:38:15	8.76	522.95	0.61	9.10	0.43	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:38:30	8.76	523.73	0.56	29.27	0.21	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:38:45	8.75	525.54	0.51	9.66	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:39:00	8.72	528.24	0.43	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:39:15	8.72	527.59	0.42	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:39:30	8.73	527.02	0.40	6.45	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:39:45	8.72	526.64	0.29	14.10	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:40:00	8.72	527.52	0.29	1.54	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:40:15	8.71	528.37	0.25	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:40:30	8.71	528.42	0.24	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:40:45	8.72	528.14	0.24	2.04	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:41:00	8.72	528.27	0.24	2.81	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:41:15	8.72	528.26	0.22	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:41:30	8.72	528.45	0.18	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:41:45	9.50	327.44	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:42:00	10.23	156.40	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:42:15	10.86	28.73	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:42:30	8.88	513.53	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:42:45	8.97	463.90	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:43:00	8.85	499.71	0.15	0.03	0.57	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:43:15	8.74	524.66	0.11	0.64	0.47	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:43:30	8.81	503.84	0.12	0.33	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:43:45	8.88	490.43	0.15	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:44:00	8.88	489.13	0.12	1.65	0.09	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:44:15	8.89	489.01	0.11	2.24	1.50	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:44:30	8.91	483.71	0.13	2.99	1.40	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:44:45	8.92	481.12	0.10	1.01	1.28	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:45:00	8.93	478.65	0.13	0.11	0.17	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:45:15	8.94	476.34	0.19	1.50	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:45:30	8.96	472.64	0.18	0.80	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:45:45	8.97	468.59	0.09	0.00	0.00	XC029811B/dg28	CO	466.2
scg8	6/10/2010	12:46:30	20.65	8.98	1.91	0.00	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:46:45	3.02	231.75	10.02	0.57	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:47:00	0.01	231.86	2.10	0.85	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:47:15	0.11	231.37	0.38	0.85	0.00	CC122506/cg8	CO	245.7

scg8	6/10/2010	12:47:30	0.16	231.75	0.19	0.95	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:47:45	6.10	176.01	0.33	1.07	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:48:00	20.03	12.34	1.27	1.07	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:48:15	14.98	96.84	0.86	0.78	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:48:30	0.30	268.69	0.09	0.00	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:48:45	0.00	271.48	0.06	1.17	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:49:00	0.00	264.57	0.02	1.77	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:49:15	0.00	243.83	0.01	2.78	0.00	CC122506/cg8	CO	245.7
sdg28	6/10/2010	12:49:45	12.37	260.03	0.12	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:50:00	8.92	428.06	0.08	2.02	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:50:15	8.70	473.94	0.08	1.67	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:50:30	8.70	474.32	0.08	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:50:45	8.72	470.59	0.09	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:51:00	8.82	449.28	0.08	1.58	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:51:15	8.80	454.15	0.08	21.13	1.48	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:51:45	24.95	155.52	0.24	19.65	6.05	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:52:00	25.00	408.79	0.13	17.59	5.83	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:52:15	25.00	435.43	0.06	15.08	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:52:30	25.00	439.00	0.07	9.83	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:52:45	25.00	443.95	0.04	4.03	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:53:00	25.00	447.10	0.05	1.15	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:53:15	25.00	452.04	0.05	1.92	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:53:30	25.00	458.25	0.04	8.76	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:54:00	25.00	168.15	0.25	3.79	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:54:15	25.00	241.39	0.27	2.08	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:54:30	25.00	237.50	0.05	1.92	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:54:45	25.00	237.21	0.05	1.62	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:55:00	25.00	237.18	0.05	2.12	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:55:15	25.00	236.21	0.05	12.39	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:55:30	25.00	236.87	0.04	12.29	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:55:45	25.00	236.36	0.02	12.18	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	12:56:00	25.00	236.31	0.04	5.10	0.00	XC029811B/dg28	CO	233.1
scg8	6/10/2010	12:56:30	13.73	193.67	0.28	5.77	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:56:45	0.00	243.20	0.00	9.50	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:57:00	0.00	243.47	0.00	10.38	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:57:15	0.00	243.70	0.00	0.00	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:57:30	0.00	243.86	0.00	1.65	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:57:45	0.00	243.77	0.00	3.42	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:58:00	0.00	243.62	0.00	1.41	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	12:58:15	0.00	243.85	0.00	1.07	0.00	CC122506/cg8	CO	245.7
sdg28	6/10/2010	12:58:30	6.30	217.40	0.01	1.07	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:58:45	25.00	305.84	0.09	0.36	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:59:00	25.00	466.28	0.00	0.20	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:59:15	25.00	456.02	0.00	2.35	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:59:30	25.00	468.39	0.00	1.27	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	12:59:45	25.00	454.04	0.00	0.00	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:00:00	25.00	465.58	0.00	10.64	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:00:15	25.00	467.35	0.00	9.64	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:00:30	25.00	468.38	0.03	3.42	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:01:00	25.00	151.45	0.09	3.46	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:01:15	25.00	228.40	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:01:30	25.00	228.11	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:01:45	25.00	228.29	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:02:00	25.00	232.44	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:02:15	25.00	235.16	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:02:30	25.00	234.28	0.00	0.00	0.00	XC029811B/dg28	CO	233.1
scg8	6/10/2010	13:02:45	25.00	133.61	0.00	0.00	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:03:00	4.50	235.94	0.01	0.04	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:03:15	0.00	242.16	0.00	0.64	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:03:30	0.00	242.32	0.00	1.37	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:03:45	0.00	242.55	0.00	2.14	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:04:00	0.00	242.63	0.00	0.30	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:04:15	0.00	242.48	0.00	0.66	0.00	CC122506/cg8	CO	245.7
sdg28	6/10/2010	13:04:30	3.02	231.22	0.00	2.35	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:04:45	25.00	273.18	0.05	1.75	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:05:00	25.00	429.35	0.39	1.77	5.67	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:05:15	25.00	442.16	0.00	5.34	4.74	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:05:30	25.00	450.57	0.00	4.81	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:05:45	25.00	456.10	0.00	4.27	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:06:00	25.00	458.14	0.01	17.77	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:06:15	25.00	462.35	0.01	15.51	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:06:30	25.00	463.04	0.00	4.91	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:06:45	25.00	463.88	0.00	13.50	0.00	XC029811B/dg28	CO	466.2
sdg28	6/10/2010	13:07:15	25.00	166.47	0.15	7.92	0.44	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:07:30	25.00	235.01	0.00	11.34	1.71	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:07:45	25.00	234.60	0.00	15.38	0.67	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:08:00	25.00	234.16	0.00	3.69	0.39	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:08:15	25.00	234.16	0.00	2.75	2.99	XC029811B/dg28	CO	233.1
sdg28	6/10/2010	13:08:30	25.00	234.15	0.00	4.49	2.49	XC029811B/dg28	CO	233.1
scg8	6/10/2010	13:09:00	22.85	201.24	0.10	2.71	0.27	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:09:15	0.27	241.63	0.02	6.20	0.11	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:09:30	0.00	241.88	0.00	6.20	0.43	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:09:45	0.00	241.90	0.00	6.20	0.14	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:10:00	0.00	241.94	0.00	18.41	0.00	CC122506/cg8	CO	245.7
scg8	6/10/2010	13:10:15	0.00	241.85	0.00	16.02	0.00	CC122506/cg8	CO	245.7

MidCon COMPRESSION

Moisture Sampling Data Worksheet

Run Number: 1
Client Name: Arkansas Midstream
Source Name: Harmony
Source Location: White Co AR
Unit Number: MC 2427
Operator: David Rank

Date: 6-10-10
Ambient Temperature: 73 °F
Barometric Pressure (P_b): 29.70 "Hg
Dry Gas Meter ID: 912006
Barometer ID: —
Initial Leak check @ 10 "Hg = 0.000 cfm
Final Leak check @ 16 "Hg = 0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
8:16	0.000	.7	262	3.0	61	65
8:21	2.14	.7	262	3.0	59	66
—						
8:31	6.30	.7	263	3.0	53	67
8:36	8.80	.7	263	3.0	51	67
8:41	10.43	.7	263	3.0	51	68
8:46	12.56	.7	264	3.0	50	69
8:51	14.69	.7	264	3.0	50	70
8:56	16.86	.7	264	3.0	49	70
9:01	19.18	.7	264	3.0	49	71
—						
9:11	23.29	.7	264	3.0	48	72
9:16	25.426					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	714.6	673.1	607.6	926.5
Final	832.5	685.0	609.8	932.4
Diff.	117.9	11.9	2.2	5.9

Volume Sampled (V_m) = 25.426
Total Impinger Weight (V_w) = 137.9
Avg. Meter Temp. (T_m) = 68
Avg. ΔH = .7
Dry Gas Meter Cal Factor (Y) = 1.013

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} = \frac{\cancel{24.667}\ 25.601}{\cancel{.411}\ 0.427} \text{ sft}^3 \text{ scfm}$$

$$V_{wstd} = 0.04706 \times V_w = \cancel{6.509}\ 6.490 \text{ sft}^3$$

$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}} = \cancel{20.88}\ 20.22\%$$

Moisture Sampling Data Worksheet

Run Number: 2
Client Name: Arkansas Midstream
Source Name: Harmony CS
Source Location: White AR
Unit Number: MC2427
Operator: David Rauh

Date: 6/10/10
Ambient Temperature: 76 °F
Barometric Pressure (P_b): 29.70 "Hg
Dry Gas Meter ID: 912006
Barometer ID: —
Initial Leak check @ 10 "Hg = 0.000 cfm
Final Leak check @ 16 "Hg = 0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
9:44	0.000	.7	264	3.0	60	71
9:49	2.23	.7	264	3.0	53	71
—	—	—	—	—	—	~~9~~
9:59	6.63	.7	265	3.0	51	71
10:04	9.35	.7	265	3.0	51	71
10:09	11.14	.7	265	3.0	52	72
10:14	13.23	.7	265	3.0	53	72
10:19	15.34	.7	265	3.0	53	73
10:24	17.58	.7	265	3.0	53	73
10:29	19.92	.7	265	3.0	53	74
10:34	22.09	.7	265	3.0	54	74
10:39	24.22	.7	265	3.0	54	74
10:44	26.492					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	832.5	685.0	609.8	932.4
Final	1013.8	644.5	611.3	935.3
Diff.	181.3	-80.5	~~1.1~~ 1.5	2.9

Volume Sampled (V_m) = 26.492
Total Impinger Weight (V_w) = ~~144.8~~ 145.2
Avg. Meter Temp. (T_m) = 72
Avg. ΔH = .7
Dry Gas Meter Cal Factor (Y) = 1.013

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} = \text{~~26.474~~ 26.489 sft}^3 \quad \text{.441 scfm}$$

$$V_{wstd} = 0.04706 \times V_w = \text{~~6.835~~ 6.833 sft}^3$$

$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}} = \text{~~20.52~~ 20.51 \%}$$

MidCon COMPRESSION

Moisture Sampling Data Worksheet

Run Number: 3
Client Name: Arkansas Midstream
Source Name: Harmony CS
Source Location: White AR
Unit Number: MC2427
Operator: David Rawh

Date: 6/10/10
Ambient Temperature: 79 °F
Barometric Pressure (P_b): 29.7 "Hg
Dry Gas Meter ID: 912006
Barometer ID: —
Initial Leak check @ 10 "Hg = 0.000 cfm
Final Leak check @ 16 "Hg = 0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
11:03	0.000	.7	264	3.0	61	73
1108	2.28	0.7	265	3.0	50	73
11:13	4.42	.7	266	3.0	48	73
11:18	6.65	.7	267	3.0	47	73
11:23	8.87	.7	267	3.0	46	73
11:28	11.11	.7	267	3.0	46	74
11:33	13.32	.7	267	3.0	46	74
11:38	15.52	.7	267	3.0	46	75
11:43	17.75	.7	267	3.0	47	75
11:48	19.94	.7	267	3.0	47	76
11:53	22.26	.7	268	3.0	47	76
11:58	24.35	.7	268	3.0	47	77
12:03	26.528					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	759.5	644.5	611.3	935.3
Final	893.7	646.3	612.0	938.7
Diff.	134.2	1.8	.7	3.4

Volume Sampled (V_m) = 26.528
Total Impinger Weight (V_w) = 140.1
Avg. Meter Temp. (T_m) = 74
Avg. ΔH = .7
Dry Gas Meter Cal Factor (Y) = 1.013

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} =$$

~~26.411~~ 26.426 sft^3
.440 scfm

$$V_{wstd} = 0.04706 \times V_w =$$ ~~6.613~~ 6.593 sft^3

$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}} =$$ ~~20.03~~ 19.97 %

Appendix D. Calibration of Field Test Equipment

METHOD 5 DRY GAS METER PRE-TEST CALIBRATION USING CRITICAL ORIFICES

1) Select 3 to 5 critical orifices to calibrate the dry gas meter which bracket the expected operating range during testing.
2) Warm-up dry gas meter for a minimum of 15 minutes.
3) Record barometric pressure before and after calibration procedure.
4) Run at tested vacuum (from Orifice Calibration Report) for a period of time necessary to achieve a minimum total volume of 5 cubic feet.
5) Record data and information in the GREEN cells, YELLOW cells are calculated.
6) If a RED cell appears, the results are outside of allowable calibration standards.

PRE-TEST CALIBRATION

DATE: 5/24/2010 | METER ID: 912006
CALIBRATOR: David Rauh | CRITICAL ORIFICE SET SERIAL #: BI40-73

BAROMETRIC PRESSURE (in Hg):	INITIAL	FINAL	AVG (P_{bar})
	29.55	29.52	29.535

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y % Diff to Average Y	Y % Diff with other orifices	$\Delta H_@$
BI-40	1	0.2303	20.5	0.000	5.407	5.407	82	84	84	84	84	84	18.00	0.3	5.1852	5.2605	1.015			1.89
	2	0.2303	20.5	0.000	5.404	5.404	82	84	84	84	84	84	18.00	0.3	5.1823	5.2605	1.015			1.89
																AVG =	1.015	0.14	#VALUE!	
BI-48	1	0.3454	19.0	0.000	5.428	5.428	82	85	85	85	85	85	12.00	0.7	5.2009	5.2598	1.011			1.96
	2	0.3454	19.0	0.000	5.443	5.443	82	85	85	85	85	85	12.00	0.7	5.2153	5.2598	1.009			1.96
																AVG =	1.010	-0.34	#VALUE!	
BI-55	1	0.4564	16.5	0.000	5.407	5.407	82	85	85	85	85	85	9.00	1.2	5.1873	5.2125	1.005			1.93
	2	0.4564	16.5	0.000	5.402	5.402	82	85	86	85	86	86	9.00	1.2	5.1777	5.2125	1.007			1.93
																AVG =	1.006	-0.75	#VALUE!	
BI-63	1	0.5845	14.5	0.000	5.260	5.260	81	82	83	82	83	83	7.00	1.8	5.0771	5.1969	1.024			1.77
	2	0.5845	14.5	0.000	5.276	5.276	81	83	84	83	84	84	7.00	1.8	5.0831	5.1969	1.022			1.77
																AVG =	1.023	0.95	#VALUE!	
	1					0.000						#DIV/0!								
	2					0.000						#DIV/0!								
																AVG =				

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.013

AVERAGE $\Delta H_@$ = 1.89

POST-TEST CALIBRATION CHECK

METHOD 5 DRY GAS METER POST-TEST CALIBRATION CHECK

1) Select 2 critical orifices to bracket the operating range during testing.
2) Record barometric pressure before and after calibration procedure.
3) Run at tested vacuum (from Orifice Calibration Report) for a period of time greater than 5 minutes
4) Record data and information in the GREEN cells, YELLOW cells are calculated.
5) If a RED cell appears, the results are outside of allowable calibration standards.

DATE: 6/20/2010 | METER ID: 912006
CALIBRATOR: David Rauh | CRITICAL ORIFICE SET SERIAL #: BI40-73

BAROMETRIC PRESSURE (in Hg):	INITIAL	FINAL	AVG (P_{bar})
	28.55	28.55	28.55

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y % Diff to Average Y	Y % Diff with other orifices	$\Delta H_@$
BI-63	1	0.5845	14	0.000	4.500	4.500	66	66	66	66	66	66	6.00	1.8	4.3311	4.3669	1.008			1.84
	2	0.5845	14	0.000	5.232	5.232	66	66	67	66	67	67	7.00	1.8	5.0308	5.0948	1.013			1.84
																AVG =	1.010	0.83	1.68	
BI-48	1	0.3454	19	0.000	2.713	2.713	66	67	67	67	67	67	6.00	0.65	2.5985	2.5806	0.993			1.89
	2	0.3454	19	0.000	2.709	2.709	66	67	67	67	67	67	6.00	0.65	2.5947	2.5806	0.995			1.89
																AVG =	0.994	-0.83	-1.65	

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.002

AVERAGE $\Delta H_@$ = 1.87

Horiba Instruments
5900 Hines Drive
Ann Arbor, Michigan 48108

Certificate of Calibration

Certificate Number: D000 99DN-081209

All instruments in the performance of the below calibration have direct traceability to the National Institute of Standards and Technology (NIST). The calibration has been performed using the below listed procedure number.

Customer: MID CON COMPRESSION, LLC
Customer Address: P.O. Box 18881
OKLAHOMA CITY OK 73154

Manufacturer: STEC
Description: Gas Divider
Condition Received: Failed
Cal Procedure: WI-QM-B-010
Date Calibrated: 8/12/09

Part Number: SGD-710C
Serial Number: D000 99 DN
Condition Returned: Passed
Uncertainty: +/- 2% point
Recalibration Due: 8/12/10

Standards Traceability

Mfr./Model Number	Serial #	Test Number	Cal. Date	Due Date
DHI/3E5	1015	65834	03/17/09	03/17/10
DHI/3E5	1016	65833	03/19/09	03/19/10
DHI/Molbox 1A	448	65835	03/19/09	03/19/10

Service Technician: _____ **Date:** 8/12/09

QA Manager: _____ **Date:** 8/12/09

This certificate/report may not be reproduced, except in full, without the written approval of Horiba

MidCon COMPRESSION

NMHC Measurement Performance Data

Date of Calibration: 5/27/2010

Next Calibration Due: 11/28/2010

Analyzer Make: California Analytical Instruments

Calibration Paramerters: Propane as C_1

Analyzer Model: 600M-HFID

Fuel: 40% H2/60% He

Analyzer Serial Number: V05071

Methane Cutter Temp (°C): 341.6

Calibration Gases Used

	C_1 Value	Cylinder Serial Number
Nitrogen	0.0	ALM003310
Propane	1413.6	CC45857
Ethane	1007.0	CC122420
Methane	515.4	CC212360

Calibration Values

	Value	THC	CH_4
Nitrogen	0.0	7.7	7.1
Propane	1413.6	1439.4	10.3

Response Factor Data

Run1	Ethane	1007.0	997.8	90.5
	Methane	515.4	535.8	506.9
Run 2	Ethane	1007.0	999.1	92.3
	Methane	515.4	535.8	506.9
Run 3	Ethane	1007.0	999.3	92.9
	Methane	515.4	535.8	508.2
Averages	Ethane	1007.0	998.7	91.9
	Methane	515.4	535.8	507.3

Results

RF_{CH4}	PF_{C2H6}	PF_{CH4}
1.03958	0.09202	0.94687

Person performing calibration: DAVID RAUH

Appendix E. Calibration Gas Cylinder Certifications

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

1290 COMBERMERE STREET
Shipped TROY MI 48083
From: Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ANALYSIS

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-82542-001
PO#: PURE STOCK
ITEM #: 0501841 AL
DATE: 18Nov2009

CYLINDER #: ALM003310
FILL PRESSURE: 02000 PSIG

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS
SO2	0.1 PPM
NOX	0.1 PPM
CO	0.5 PPM
CO2	1 PPM
THC	0.1 PPM
H2O	2 PPM
O2	0.5 PPM

ANALYST: R. LESNIAK

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott

Shipped From:
1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA
PURE STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-86318-002
PO#: PURE STOCK
ITEM #: 0501030 AL
DATE: 30Mar2010

CYLINDER #: AAL20118
FILL PRESSURE: 02000 PSIG
PRODUCT EXPIRATION: 30Mar2013

PURE MATERIAL: AIR
CAS# 132259-10-0

GRADE: ACID RAIN CEM 0

PURITY: -

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	20 TO 21%	20.38%

QC BATCH : AIR011110

ANALYST: SAJAD HYDER

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: OG&E STOCK
Project No.: 05-71710-002

Customer

AIR LIQUIDE AMERICA L.P.
OG&E STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL1885 **Certification Date:** 29Dec2008 **Exp. Date:** 29Dec2011
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
OXYGEN	11.0 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
CAI/110P/V03018	22Dec2008	PARAMAGNETIC

ANALYZER READINGS

(Z = Zero Gas R = Reference Gas T = Test Gas r = Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

OXYGEN

First Triad Analysis		
Date: 29Dec2008	Response Unit:%	
Z1 = 0.00000	R1 = 23.20000	T1 = 11.03000
R2 = 23.20000	Z2 = 0.00000	T2 = 11.03000
Z3 = 0.01000	T3 = 11.03000	R3 = 23.21000
Avg. Concentration:	11.02	%

Second Triad Analysis	

Calibration Curve	
Concentration = A + Bx + Cx2 + Dx3 + Ex4	
r = 0.999999	
Constants:	A = -0.00558057
B = 0.999821643	C = 0
D = 0	E = 0

APPROVED BY: JEFF GROTEAU

Page 1 of 1

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Customer:	MidCon Compression		
Part Number:	E02NI99E15A01V5	Reference Number:	83-124137218-3
Cylinder Number:	XC032439B	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2015 PSIG
Analysis Date:	May 23, 2008	Valve Outlet:	350

Expiration Date: May 23, 2011

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
CARBON MONOXIDE	970.0 PPM	955.8 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	08060423	CC255481	1002.4PPM CARBON MONOXIDE/NITROGEN	Apr 15, 2012
NTRM	08060306	CC254480	250.0PPM CARBON MONOXIDE/NITROGEN	May 15, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIRHCO	FTIR	May 09, 2008

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Customer:	MidCon Compression		
Part Number:	E02NI99E15A3299	Reference Number:	83-124136750-1
Cylinder Number:	XCO29811B	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2015 PSIG
Analysis Date:	May 20, 2008	Valve Outlet:	350

Expiration Date: May 20, 2011

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
CARBON MONOXIDE	2400 PPM	2331 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	00052501	SG9160692BAL	1985PPM CARBON MONOXIDE/NITROGEN	Oct 02, 2010

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
RCOGH	NonDispersive Infrared	Apr 29, 2008

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

11426 FAIRMONT PKWY, LA PORTE, TX 77571 Phone: 800-248-1427 Fax: 281-474-8419

CERTIFICATE™ OF ACCURACY: Interference Free Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
11426 FAIRMONT PKWY
LA PORTE, TX 77571

P.O. No.: MUNN
Project No.: 04-76763-001

Customer
MUNN SUPPLY

3817 N 4TH STREET
ENID OK 73702

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM013796 **Certification Date:** 01Oct2009 **Exp. Date:** 01Oct2011
Cylinder Pressure*:** 1716 PSIG **Batch No:** LAP0001338

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	475	PPM	+/- 2%	NIST and VSL
NITRIC OXIDE	480	PPM	+/- 2%	NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	481.	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION		COMPONENT
NTRM 1680	02Oct2011	KAL003944	499.8	PPM	CARBON MONOXIDE
NTRM 1686	01Sep2010	KAL003495	490.0	PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//MG-09-149	10Sep2009	FTIR
FTIR//MG-09-149	02Sep2009	FTIR

Special Notes: ALAS DOC# 34498668 MUNN SUPPLY
3817 N 4TH STREET ENID OK 73702

APPROVED BY: for Nora Pike
GARY WRIGHT

Page 1 of 1

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E02NI99E15A01B3	Reference Number:	54-124145562-1
Cylinder Number:	CC45857@	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Chicago - IL	Cylinder Pressure:	2015 PSIG
Analysis Date:	Jul 18, 2008	Valve Outlet:	350

Expiration Date: Jul 18, 2011

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
PROPANE	1200 PPM	1178 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM/C3H8	50605	XC024196B	4941PPM PROPANE/NITROGEN	May 01, 2010

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
(GC-1)SHIMADZU	TCD	Jun 19, 2008

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

CERTIFIED MASTER CLASS

Single-Certified Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083

Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: Certified Master Class Calibration Standard

Product Information
Project No.: 05-78094-002
Item No.: 05020002630PAL
P.O. No.: X14-EMSUP MIDCON

Cylinder Number: AUM050638
Cylinder Size: 30AL
Certification Date: 24Aug2009
Expiration Date: 24Aug2011

Customer

AIR LIQUIDE AMERICA
MIDCON
801 W NORTH CARRIER PKWY
GRAND PRAIRIE, TX 75050-1003

CERTIFIED CONCENTRATION

Component Name	Concentration (Moles)		Accuracy (+/-%)
NITROGEN DIOXIDE	101.	PPM	2
AIR		BALANCE	

TRACEABILITY

Traceable To

Scott Reference Standard

APPROVED BY: [signature] DATE: 6/22/10

Page 1 of 2

SPECIFICATIONS

Component Name	Requested Concentration (Moles)		Certified Concentration (Moles)		Blend Tolerance Result (+/-%)	Certified Accuracy Result (+/-%)
NITROGEN DIOXIDE	101.	PPM	101.	PPM	1.9	0.02
AIR		BAL		BAL		

TRACEABILITY

Traceable To
Scott Reference Standard

PHYSICAL PROPERTIES

Cylinder Size: 30AL

Pressure: 1950 PSIG
Expiration Date: 24Aug2011

SPECIAL HANDLING INSTRUCTIONS

Do not use or store cylinder at or below the stated dew point temperature. Possible condensation of heavier components could result. In the event the cylinder has been exposed to temperatures at or below the dew point, place cylinder in heated area for 24 hours and then roll cylinder for 15 minutes to re-mix.

Use of calibration standards at or below dew point temperature may result in calibration error.

Page 2 of 2

MidCon COMPRESSION

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Customer:	MidCon Compression		
Part Number:	E02NI99E15A2543	Reference Number:	83-124137218-7
Cylinder Number:	CC122506	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2015 PSIG
Analysis Date:	May 23, 2008	Valve Outlet:	350

Expiration Date: May 23, 2011

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
CARBON MONOXIDE	246.0 PPM	245.7 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	08060306	CC254480	250.0PPM CARBON MONOXIDE/NITROGEN	May 15, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIRHCO	FTIR	May 09, 2008

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

Appendix F. Engine Operational Data

MidCon COMPRESSION

SUMMARY OF UNIT OPERATIONING DATA

Job Name: Arkansas Midstream Gas Services Date: 6/10/10

Job Location: MC2427 Operator: Mr. Steve Bornsen

Serial No.: C-17316/1 Unit: Harmony Compressor Station

TEST RUN NO.	1	2	3
Observation Time:	8:20	9:43	11:03
AMBIENT CONDITIONS:			
Ambient Temp (°F)	73.00	76.00	79.00
Barometric Press. ("Hg)	29.70	29.70	29.70
Elevation (Ft.)	300		
ENGINE OPERATIONAL DATA:			
Speed (RPM)	1165	1163	1160
Rated Speed (RPM)	1200		
Manifold Pressure ("Hg / PSIA)	38.8	38.7	38.9
Intake Manifold Temperature (°F)	136	136	138
Fuel Header Pressure ("lpsig)	40.0	40.0	40.0
Rated Engine Horsepower (BHP)	1380		
Calculated Engine Horsepower (BHP)	1249	1249	1249
Percent Load	90.5%	90.5%	90.5%
Fuel Rate (SCFH)	10699	10859	10834
Brake Specific Fuel Consumption (btu/bhp-hr)	7719	7835	7817
Exhaust Flow Rate (DSCFH)	91877	93251	93036
Exhaust Temperature (°F)			
Pre-Converter Temperature (°F)	905	904	905
Oxygen Sensor (mV)	0.769	0.750	0.754
COMPRESSOR OPERATIONAL DATA:			
WKI Number	85	85	85
Suction Pressure (PSIG)	35	35	35
Suction Temperature (ºF)	80	80	80
Final Discharge Pressure (PSIG)	1180	1180	1180
Final Discharge Temperature (ºF)	84	100	100
Compressor Volume (MMSCFD)	5.125	5.158	5.041

MidCon COMPRESSION

Field Data Sheet

*Customer: Arkansas Midstream Gas *Date: 6/10/10

Address _____ * County, State: White County AR

*Contact: Steve Childress Phone 501-322-1598

		TST-01	TST-02	TST_03	TST-04	TST-05
	Time	8:20	9:43	11:03		
*	Facility	Harmony CS				
*						
*	Source Make	Waukesha				
*	Source Model	L5794 GSI				
*	Unit #	A C2429				
*	Serial #	C-1931611				
**	Temperature	73	76	79		
	Amb. Press.	29.90	29.90	29.90		
	Elevation	300				
***	Fuel Rate	256.772	260,013	260,013		
***	BHP	1249				
	ign timing	+16.5-24	24	24		
**	rpm	1165	1163	1160		
	boost					
**	manifold press	38.6 38.9	38.7 38.9	38.8 39.0		
**	manifold press scale	In Hg	In Hg	In Hg		
**	manifold temp	134	136	138		
**	Fuel Hdr Press.	40 psi	40 psi	40 psi		
**	Suction Press. (psig)	35	35	35		
	Suction Temp. (F)					
**	Disch press	1180	1180	1180		
	Disch Temp	94	100	105		
**	Capacity	5.225	5.158	5.040		
	Exh. Temp					
**	Converter Temp	959 905	959 904	960 905		
**	O2 Sensor Reading	767 772	748 752	752 759		
	Presure Diff					
	Temperature Diff					
*	Leak Check					
*	Temps					
*	NOX Convertor					
	High Gas	∞	∞	∞		
	Mid Gas	∞	∞	∞		
	Dilute 1					
	Dilute 2					
	High Gas					

* = manditory ** = Before end of Test 1 *** = Before Start of Test 1

DRESSER Waukesha

Waukesha Engine
BHP / IMP Prediction
VHP Series Four

VHP Instructions | Clear | Menu

Customer: Arkansas Midstream Gas Services
Project: MC2427
Engine Information: C-17316/1
Calculated By: David Rauh
Date Performed: 10-Jun-10
Additional Notes:

Calculate: (•) BHP ( ) IMP

Select Engine Model: L5794GSI

Required Inputs:	L5794GSI	Engine/Site Values	Multiplier	Resultant
IMP ("HG gauge) x Engine Speed(rpm)		10485	0.0351	368.0235
Intake Manifold Temperature (°F)		136	-2.195	-298.52
Engine Speed (RPM)		1165	0.526	612.79
Ignition Timing (°BTDC)		24	8.389	201.336
Waukesha Knock IndexTM (WKITM)		85	-2.055	-174.675
Exhaust Oxygen (dry volume %)		0.01	-43.65	-0.4365
Barometer ("Hg)		29.7	49.03	1456.191
Intercept		1	-915.8	-915.8

Calculated Bhp	1249
Calculated kW_b	931
Calculated BMEP (psi)	146.7
Calculated BMEP (bar)	10.1

Based on the following data ranges: (Reference Service Bulletin 14-2755B or latest revision)

- 50 – 173 psi BMEP
- 115 – 143° F Intake Manifold Temperature
- 181 – 242° F Jacket Water Outlet Temperature
- 37 – 94 WKI™
- 700 – 1200 RPM Engine Speed
- 12 – 27° BTDC Ignition Timing
- 0.16 – 1.56% (Dry) Exhaust Oxygen for GSI's
- 7.5 – 8.2% (Dry) Exhaust Oxygen for LT's

** Accuracy is ±5% on power, and ±2 inHG for intake manifold pressure
** The above calculation is intended as a guide for estimating average horsepower or intake manifold pressure for a VHP-GSI, GL Series Four engine

Waukesha Engine, Dresser, Inc. Bhp-Pred v1.6

Appendix G. Fuel Analysis and F_d Calculations

MidCon COMPRESSION

U

J-W MEASUREMENT COMPANY

Shreveport, LA Tyler, TX Fairfield, TX Victoria, TX
Godley, TX Broussard, LA Zapata, TX
WWW.JWOPERATING.COM
888-226-9110

J-WMC Number	: 20253806017341366	**Date Sampled**	: 03/26/2010
Customer	: ARKANSAS MIDSTREAM GAS SERVICI	**Date Analyzed**	: 04/07/2010
Station ID	: 6017341366	**Effective Date**	: 04/01/2010
Station Name	: HARMONY COMP STATION	**Pressure**	: 1067.0
Area	: LITTLE CREEK GGS CMD	**Temperature (F)**	: 74.0
County/Parish	: WHITE	**Cylinder ID**	: 0847
State	: AR	**Sampled by**	: JT
Property Cd	:		

COMPONENT	MOL %	GPM @ 14.65(PSIA)
Methane	96.7249	0.000
Ethane	1.0745	0.286
Propane	0.0234	0.006
Iso-Butane	0.0003	0.000
Normal-Butane	0.0010	0.000
Iso-Pentane	0.0000	0.000
Normal-Pentane	0.0000	0.000
Hexanes++	0.0000	0.000
Nitrogen	0.1894	0.000
Carbon-Dioxide	1.9864	0.000
Hydrogen Sulfide	0.0001	0.000
TOTAL	**100.0000**	**0.293**

Compressibility Factor (Z) @ 14.696 PSIA @ 60 DEG. F = 0.9979

Real Gravity: 0.581 **Ideal Gravity:** 0.579

BTU @ (PSIA)	@14.65	@14.696	@14.73	@15.025
GPM	.293	.293	0.294	.300
Ideal BTU Dry	993.45	996.57	998.87	1018.88
Ideal BTU Sat	976.06	979.18	981.49	1001.49
Real BTU Dry	995.51	998.64	1000.96	1021.04
Real BTU Sat	978.36	981.49	983.81	1003.90

Comments:

METHOD: GPA 2261-00
Note: Calibration, Standards, and testing procedures are archieved pursuant to GPA regulations.

This Analysis Report is not intended for submission to Lousiana Department of Environmental Quality.

Deborah Murphy
J-W ANALYST

MidCon COMPRESSION

FUEL GAS HEATING VALUE CALCULATIONS

Fuel Gas Analysis							
Component ID	Mole % Yi*100	MW	LHV BTU/FT^3	LHV*Yi BTU/FT^3	MW*Yi	HHV BTU/FT^3	HHV*Yi BTU/FT^3
Methane	96.7249	16.043	913.0	883.098	15.518	1010.0	976.921
Ethane	1.0745	30.070	1624.0	17.450	0.323	1769.6	19.014
Ethene		28.054	1499.1	0.000	0.000		
Propane	0.0234	44.097	2322.0	0.543	0.010	2516.1	0.589
Propene		42.081	2182.1	0.000	0.000		
I-Butane	0.0003	58.123	3010.0	0.009	0.000	3251.9	0.010
N-Butane	0.0010	58.123	3020.0	0.030	0.001	3262.3	0.033
I-Pentane		72.150	3718.0	0.000	0.000	4000.9	0.000
N-Pentane		72.150	3706.8	0.000	0.000	4008.9	0.000
N-Hexane		86.177	4403.9	0.000	0.000	4755.9	0.000
N-Heptane		100.204	5100.3	0.000	0.000	5502.5	0.000
Nitrogen	0.1894	28.013	0.0	0.000	0.053		
Oxygen		31.999	0.0	0.000	0.000		
Helium		4.003	0.0	0.000	0.000		
Carbon Dioxide	1.9864	44.010	0.0	0.000	0.874		
Carbon Monoxide		28.010	320.5	0.000	0.000		
Hydrogen		2.016	273.8	0.000	0.000		
Hydrgen Sulfide	0.0001	34.082	586.7	0.001	0.000		
Water Vapor		18.015	0.0	0.000	0.000		
		@60°F., 14.65 psia			Average MW		
Total	100.0000	LHV Dry btu/ft^3		901.13	16.78	HHV	996.567

Notes:

Carbon Mole Weight =	12.01115
Hydrogen Mole Weight =	1.00797
Oxygen Mole Weight =	15.99940
Nitrogen Mole Weight =	14.00670

FUEL GAS HEATING VALUE CALCULATIONS

Component	(1) Mol. % Volume	(2) Mol. Weight	(3) Fuel Fraction Mol. Wt.	(4) Weight %	(5) Gross BTU BTU/lb.	(6) Carbon Mole Wt.	(7) Hydrogen Mole Wt.	(8) Oxygen Mole Wt.	(9) Nitrogen Mole Wt.
Hydrogen H2	0.0000	2.0159	0.0000	0.000		0.000	0.000		
Oxygen O2	0.0000	31.9988	0.0000	0.000		0.000	0.000	0.000	
Nitrogen N2	0.1894	28.0134	0.0531	0.316		0.000	0.000		0.053
CO2	1.9864	44.0100	0.8742	5.210		0.239	0.000	0.636	
CO	0.0000	28.0134	0.0000	0.000		0.000	0.000	0.000	
Methane C1H4	96.7249	16.0430	15.5176	92.482	22172.8974	11.618	3.900		
Ethane C2H6	1.0745	30.0701	0.3231	1.926	431.5631	0.258	0.065		
Propane C3H8	0.0234	44.0972	0.0103	0.061	13.3631	0.008	0.002		
Iso-Butane IC4H10	0.0003	58.1243	0.0002	0.001	0.2214	0.000	0.000		
N-Butane NC4H10	0.0010	58.1243	0.0006	0.003	0.7404	0.000	0.000		
Iso-Pentane IC5H12	0.0000	72.1514	0.0000	0.000	0.0000	0.000	0.000		
N-Pentane NC5H12	0.0000	72.1514	0.0000	0.000	0.0000	0.000	0.000		
Hexanes + C6H14+	0.0000	86.1785	0.0000	0.000	0.0000	0.000	0.000		
Heptanes + C7H16+	0.0000	100.2056	0.0000	0.000	0.0000	0.000	0.000		
H2S	0.0001	34.0760	0.0000	0.000	0.0000				
	100.0000%		16.779	100%					

22618.7855 BTU/lb Gross Heating Value	Mass by elements (gr/mole)	12.124	3.967	0.636	0.053	= 16.78
	Percent of Total Mass	72.254	23.642	3.788	0.316	= 100.00%

Calulation of O2 based "F" factor using Fuel Gas Analysis

Where:

O_2F_d	=	O2 F factor (dry) SCF/million BTU
K	=	Conversion factor (1,000,000 BTU)
K_H	=	3.64 SCF of exhaust / lb of hydrogen burned / (% hydrogen)
K_C	=	1.53 SCF of exhaust / lb of carbon burned / (% carbon)
K_S	=	0.57 SCF of exhaust / lb of sulphur burned / (% sulphur)
K_N	=	0.14 SCF of exhaust / lb of nitrogen burned / (% nitrogen)
K_o	=	0.46 SCF of exhaust / lb of oxygen burned / (% oxygen)
GCV	=	Gross caloric value of the fuel based on fuel gas analysis in BTU/lb

PERCENT OF TOTAL MASS:

H	=	23.64 %
C	=	72.25 %
S	=	0.00 %
N	=	0.32 %
O	=	3.79 %

O_2F_d = **8617**

Appendix H. Resumes of Test Personnel

James N. Mode, QSTI; Environmental, Health & Safety Specialist

EDUCATION

Baylor University
Waco, Texas
Obtained a B.A. degree with a major in Pre-medical Biology and a minor in Telecommunications Production.

Sam Houston State University
Huntsville, Texas
Worked towards a Masters of Science majoring in Microbiology.

PROFESSIONAL CERTIFICATIONS

Qualified Source Testing Individual (Groups I, II, III and IV)
Certified Visible Emissions Evaluator
Hazmat Certified
Adult CPR Certified
Standard First Aid Certified

TECHNICAL EXPERIENCE

Attended a 40-hour Occupational and Environmental Training Program on Hazardous Materials (CFR 1910.120).

Attended a two day short course, "Performing and Observing Source Sampling."

Attended a 10-hour OSHA training Course.

Participated in the sampling of over 1000 sources, including over 750 serving in the roll of field testing supervisor.

Thoroughly trained in all EPA testing procedures, 1997-present.

Responsible for the certification of Continuous Monitoring Systems (CEMS) for NO_x, SO_2, CO_2, O_2 and flow rate primarily for the utility industry throughout the United States.

Experienced with VOST sampling procedures (Method 0030).

Experienced with the calibration techniques for all field testing equipment.

TECHNICAL EXPERIENCE (cont.)

Experienced with the analysis of commercial calibration gas cylinders for NO_x, SO_2, CO_2 and O_2.

Experienced with various multiple metal and acid gas sampling methods.

Thoroughly trained in the operation and routine maintenance of the following:

- Thermo Environmental Model 10S and 42C Oxides of Nitrogen Analyzers
- Teledyne Model 326 Oxygen Analyzer
- Horiba Model PIR2000 Carbon Dioxide Analyzer
- Horiba Model VIA510 Carbon Dioxide Analyzer
- J.U.M. Model VE-7 Total Hydrocarbon Analyzer
- Thermo Environmental Model 48 Carbon Monoxide Analyzer
- Western Research Model 721M Sulfur Dioxide Analyzer
- California Analytical 600 Series Oxygen Analyzer
- California Analytical 600 Series Oxides of Nitrogen Analyzer
- California Analytical 600 Series Hydrocarbon Analyzer
- California Analytical 600 Series Carbon Monoxide Analyzer

Steven J. Bornsen; Field Supervisor

EDUCATION

University of Texas at Arlington
Arlington, Texas
Obtained a B.S. degree with a major in Geology and a minor in Statistics.

PROFESSIONAL CERTIFICATIONS

Certified Visible Emissions Evaluator
Hazmat Certified
Adult CPR Certified
Standard First Aid Certified

TECHNICAL EXPERIENCE

Attended a 40-hour Occupational and Environmental Training Program on Hazardous Materials (CFR 1910.120).

Attended a two day short course, "Performing and Observing Source Sampling."

Attended a 10-hour OSHA training Course.

Participated in the sampling of over 1000 sources, including over 750 serving in the roll of field testing supervisor.

Thoroughly trained in all EPA testing procedures, 1997-present.

Responsible for the certification of Continuous Monitoring Systems (CEMS) for NO_x, SO_2, CO_2, O_2 and flow rate primarily for the utility industry throughout the United States.

Experienced with VOST sampling procedures (Method 0030).

Experienced with the calibration techniques for all field testing equipment.

Experienced with the analysis of commercial calibration gas cylinders for NO_x, SO_2, CO_2 and O_2.

Experienced with various multiple metal and acid gas sampling methods.

TECHNICAL EXPERIENCE (cont.)

Thoroughly trained in the operation and routine maintenance of the following:

- Thermo Environmental Model 10S and 42C Oxides of Nitrogen Analyzers
- Teledyne Model 326 Oxygen Analyzer
- Horiba Model PIR2000 Carbon Dioxide Analyzer
- Horiba Model VIA510 Carbon Dioxide Analyzer
- J.U.M. Model VE-7 Total Hydrocarbon Analyzer
- Thermo Environmental Model 48 Carbon Monoxide Analyzer
- Western Research Model 721M Sulfur Dioxide Analyzer
- California Analytical 600 Series Oxygen Analyzer
- California Analytical 600 Series Oxides of Nitrogen Analyzer
- California Analytical 600 Series Hydrocarbon Analyzer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733

November 8, 2010

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: 7005 1820 0003 7457 5736

Mr. Levi Poe
Corporate Air Supervisor
Chesapeake Operating, Inc.
6100 North Western Ave.
Oklahoma City, Oklahoma 73118

Re: Administrative Compliance Order Docket Number: CAA-06-2011-3303

Dear Mr. Poe:

Enclosed is an Administrative Compliance Order (Order) issued to Chesapeake Operating, Inc., for violation of the Clean Air Act (42 U.S.C. § 7412(r)(1)). The violation was identified based on our November 4, 2010, inspection of your oil and gas production facilities located in Clinton, Washita County, Oklahoma. The general duty clause violation consists of an unpermitted release of extremely hazardous substances; specifically, methane.

Effective upon receipt of this Order, you shall fix, repair or replace the leaking components as noted in the enclosed Order, and comply with the provisions of this Order. The Environmental Protection Agency is committed to ensuring compliance with the requirements of the Clean Air Act, and my staff will assist you in any way possible.

If you have any questions, please contact Tony Robledo, of my staff, at (214) 665-8182.

Sincerely,

John Blevins
Director
Compliance Assurance and
Enforcement Division

Enclosure

cc: Brad Flaming
Oklahoma Department of Environmental Quality

Michael Park
Area District Manager
Chesapeake Operating, Inc.

U.S. ENVIRONMENTAL PROTECTION AGENCY-REGION 6
ADMINISTRATIVE COMPLIANCE ORDER
In the Matter of Chesapeake Operating, Inc., Respondent
Docket No. CAA-06-2011-3303

STATUTORY AUTHORITY

The following findings are made and Administrative Compliance Order (Order) issued under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA), by Section 113(a)(3) of the Clean Air Act (Act), 42 U.S.C. § 7413(a)(3). The Administrator has delegated the authority to issue this Order to the Regional Administrator of EPA Region 6 who has further delegated such authority to the Director of the Compliance Assurance and Enforcement Division.

FINDINGS

1. Respondent, Chesapeake Operating, Inc. is a "person" as defined by Section 302(e) of the Act, 42 U.S.C. § 7602(e).

2. At all times relevant to the violation alleged herein, Respondent operated an oil and gas production facility located in Clinton, Washita County, Oklahoma (the "Facility").

3. The Facility is a "stationary source" as defined by Section 112(r)(2)(C) of the Act, 42 U.S.C. 7412(r)(2)(C).

4. On November 4, 2010, EPA inspectors observed an unpermitted release of pollutants from a number of tank hatches as identified in ATTACHMENT A to this Order.

5. Based on information in the General Permit, the Facility Gas Analysis, and utilizing the FLIR® Gas Finder Infrared Camera, the EPA inspectors determined that the unpermitted releases of pollutants described in paragraph four (4) contained methane.

6. Methane is listed as a flammable in 40 C.F.R. 68.130, Table 3 and also described as highly flammable/explosive in the Material Safety Data Sheet as provided by the Facility.

7. Extremely hazardous substances under Section 112(r) of the Act, 42. U.S.C. § 7412(r) include, but are not limited to methane. Tank hatches are not an appropriate source for fugitive emissions and are potentially subject to explosive levels of methane.

8. Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1) requires owners and operators to design and maintain a safe facility, taking such steps as are necessary to prevent releases of extremely hazardous substances.

9. On November 4, 2010, Respondent released an unpermitted emission containing methane into the ambient air from a stationary source in violation of Section 112(r)(1) of the Clean Air Act (Act), 42 U.S.C. § 7412(r)(1).

ORDER

Based on these findings and pursuant to the authority of Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), EPA orders that Respondent take the following actions upon receipt of this Order:

1. Fix, repair, or replace the leaking components that led to the unpermitted release of extremely hazardous substances as described in paragraph four (4), upon receipt of this Order.

2. Within fifteen (15) days of the effective date of this Order, Respondent shall provide written certification to the EPA, Region 6, that the activities required in the previous paragraph have been completed and shall include any supporting documents such as receipts and invoices. The written certification and supporting documentation shall be addressed to John Blevins, U.S. EPA Region 6, Director, Compliance Assurance and Enforcement Division, 1445 Ross Ave., Dallas, TX 75202. Respondent shall sign and certify under penalty of law that the certification and supporting documentation are true, accurate, and not misleading.

GENERAL PROVISIONS

Issuance of this Order shall not be deemed an election by EPA to waive any administrative, judicial, civil or criminal action to seek penalties, fines or other relief under the Act for the violation alleged herein or other violations which may become known to EPA. EPA reserves the right to seek any remedy available under the law which it deems appropriate.

Failure to comply with this Order or the Act may result in the initiation of an administrative penalty action by EPA or a civil judicial penalty action by the U.S. Department of Justice.

Compliance with this Order does not relieve Respondent of its obligation to comply with all applicable federal, state and local laws.

Nov 8, 2010
Date

John Blevins
Director
Compliance Assurance and
Enforcement Division

ATTACHMENT A: SERIAL NUMBERS OF LEAKING TANKS/HATCHES

Tanks and Well Sites:

Miller No. 1-21 H Site
Tank Serial No. VM 8309
Tank Serial No. VM 8304

Kast Trust No. 1-22H Site
Tank Serial No. T-0624

Gwendolyn No. 2-22H Site
Tank Serial No. CR 9566

Gwendolyn No. 1-22H Site
Tank Serial No. 23364

Chesapeake ENERGY

Regulatory Department

November 23, 2010

VIA CERTIFIED MAIL # 7010 1060 0000 0256 5021

John Blevins, Director
Compliance Assurance and Enforcement Division
United States Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Administrative Compliance Order Docket Number: CAA-06-2011-3303
Chesapeake Operating, Inc.

Dear Mr. Blevins:

Chesapeake Operating, Inc. ("Chesapeake") wishes to respond to the Findings and Order set forth in Administrative Compliance Order CAA-06-2011-3303 ("Order"), which the Environmental Protection Agency ("EPA") issued to Chesapeake on November 8, 2010, pursuant to the authority of Clean Air Act Section 113(a)(3), 42 U.S.C. § 7413(a)(3). While Chesapeake appreciates the EPA's effort to inspect our operations to ensure compliance, Chesapeake respectfully disagrees with the following findings contained in the Order.

4. On November 4, 2010, EPA inspectors observed an **unpermitted release of pollutants** from a number of tank hatches.

Chesapeake: The emissions observed during EPA's inspection are authorized by the state of Oklahoma. The sites inspected by EPA, Miller No. 1-21H, Kast Trust No. 1-22H, Gwyndolyn No. 2-22H, and Gwyndolyn No. 1-22H, are minor sources and operate either under a state issued General Permit or are permit exempt. Therefore these emissions were *not* an "unpermitted" release.

5. Based on information in the General Permit, the Facility Gas Analysis, and utilizing the FLIR Gas Finder Infrared Camera, the EPA inspectors determined that the **unpermitted releases of pollutants** described in paragraph four (4) contained **methane**.

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

Chesapeake: The emissions observed during EPA's inspection were authorized emissions under state rules. Additionally, methane is *not* subject to permitting requirements under the CAA or under Oklahoma regulation.

7. Extremely hazardous substances under Section 112(r) of the Act, 42 U.S.C. § 7412(r) include, but are not limited to methane. **Tank hatches are not an appropriate source for fugitive emissions** and are potentially subject to **explosive levels of methane.**

Chesapeake: The General Duty Clause of 112(r) imposes three broad requirements: (1) identify hazards which may result from the "accidental release" of certain substances, (2) design and maintain a safe facility while taking steps *as necessary* to prevent the "accidental release" of those substances, and (3) minimize the consequences of any "accidental release" of those substances. Chesapeake has met all three requirements of the General Duty Clause. The operational design of the well sites identified in the Order specifically includes venting through tank hatches. Oil and gas production tanks are designed and permitted to release emissions through either the tank vent or tank hatch. The purpose of that operational design is to facilitate the quick dispersion of and *prevent* the accumulation of emissions. The Findings in the Order demonstrate that the tank hatches were operating as designed, and therefore show that Chesapeake has (1) identified a potential hazard – *i.e.*, the "accidental release" of accumulated emissions, (2) designed its well sites to vent emissions *as necessary* to prevent the "accidental release" of accumulated emissions, and (3) done so in order to minimize the consequences of any "accidental release" of accumulated emissions. The design allows the facility to operate safely by having controlled, permitted emissions that disperse in accordance with the requirements of 112(r) of the Act.

8. Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1) requires **owners and operators to design and maintain a safe facility, taking such steps as are necessary to prevent releases of extremely hazardous substances.**

Chesapeake: As stated above, the facilities are designed and permitted to vent emissions from the tank hatches. The purpose of the General Duty Clause is to prevent the "accidental release" of extremely hazardous pollutants. Since the facilities are designed and permitted to vent from the tank hatch, the release of emissions from the hatch is *not* accidental. Furthermore, the tank hatches are located atop the tank with the designed purpose of dispersing the emissions. This purpose of the dispersion is to ensure safe operations by preventing the accumulation of emissions.

Chesapeake appreciates EPA's inspection of our facilities. Chesapeake will continue to monitor and inspect our operations at the facilities included in the Order and will make any repairs or modifications as necessary to ensure safe operations as well as compliance with authorized emission limits.

If there are any further questions please feel free to contact Levi Poe at (405)-935-7866.

Respectfully,

Lewis Craig Managh
Vice President – Operations, Northern Division
Chesapeake Operating, Inc.

cc: Levi Poe, Corporate Air Supervisor

Chesapeake ENERGY

Regulatory Department

December 10, 2010

VIA CERTIFIED MAIL # 7010 1060 0000 0256 7599

John Blevins, Director
Compliance Assurance and Enforcement Division
United States Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Administrative Compliance Order Docket Number: CAA-06-2011-3303
Chesapeake Operating, Inc.

Dear Mr. Blevins:

Chesapeake Operating, Inc.'s ("Chesapeake") initial response regarding Administrative Compliance Order CAA-06-2011-3303 ("Order") was submitted on November 23, 2010. Chesapeake still respectfully disagrees with the finding "that an unpermitted release of pollutants from a number of tank hatches occurred on November 4, 2010". However, in response to Item #2 of the Order, Chesapeake has provided the attached receipts for replacement of the tank hatches, which was completed the week of November 22nd.

If there are any further questions please feel free to contact Levi Poe at (405)-935-7866.

Respectfully,

Michael W. Park
District Manager – Anadarko, Northern Division
Chesapeake Operating, Inc.

cc: Levi Poe, Corporate Air Supervisor

Enclosure

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

NATIONAL OILWELL VARCO

Invoice 902692258
Repeat Printout

Customer PO	Sales Order	Shipment	Packing Slip	Thank you for your prompt payment	Date: 11/22/2010
	8198849	Refer to Item	300919301		

Bill to	Ship To	Interim Ship To
Cust Num: 128063 CHESAPEAKE OPERATING - EDI PO Box 54S806 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI OSCL WEATHERFORD OK 73096	

PROPERTY NUMBER:622200 MISC:REPLUMB VENT LINE	LEASE WELL NAME:GWENDOLYN #1-22 INVOICE DESCRIPTION:PRODUCT OR SERVICE	ORDERED BY:DUSTIN W/ CANYON

Sort Seq: Order Confirmation

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	387758	FLANGE THREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	10	EA	146.99 /EA	90.15%	14.48	144.80
		/Shipment 804068789 / ORDERED BY:TOMMY W/ BELTERS						
20	3553	NIPPLE 4 IN X 4 IN THREADED BOTE ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	6	EA	265.69 /EA	93.30%	17.80	106.80
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
30	3463	NIPPLE 4 IN X 6 IN THREADED-BOTE-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	6	EA	49.82 /EA	66.66%	16.61	99.66
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
40	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	6	EA	325.37 /EA	81.25%	61.01	366.06
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
50	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	6	EA	146.63 /EA	86.48%	19.82	118.92
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
60	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	12	EA	76.74 /EA	66.67%	25.58	306.96

NATIONAL OILWELL VARCO

Invoice 902692258
Repeat Printout

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
70	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	4	EA	315.00 /EA	30.00%	220.50	882.00
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
80	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L TEREADED & COUPLED W/API CPLGS MILL VARNISE 25 FT CARBON STEEL STD 0.237 WALL TEK 11.00 WT/FT	200.000	FT	36.82 /FT	55.89%	16.24	3,248.00
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
90	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	1	EA	335.13 /EA	85.63%	48.16	48.16
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
100	4368	SWAGE 4 IN X 3 IN THREADED-BOTE-ENDS STD CARBON STEEL ASTM A234 WPB	2	EA	215.89 /EA	85.63%	31.02	62.04
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
110	4378	SWAGE 4 IN X 2 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	4	EA	235.16 /EA	85.63%	33.79	135.16
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
120	3928	ELBOW 4 IN 45 DEG TEREADED 150 LB MALLEABLE IRON BLACK	4	EA	235.72 /EA	81.25%	44.20	176.80
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
130	387758	FLANGE TEREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	3	EA	146.99 /EA	90.15%	14.48	43.44
		/Shipment 804105540 / ORDERED BY:TOMMY W/ BELTERS						
140	554123	VLV VENT 950 16 OZ ALUM / ENARDO 950	3	EA	1,749.82 /EA	34.00%	1,154.88	3,464.64
		/Shipment 804082001 / ORDERED BY:TOMMY W/ BELTERS						
150	298848	ARRESTOR FLAME 2 IN FF MDL ENR 70802-AAF / ENARDO 70802AAF	3	EA	1,204.50 /EA	10.00%	1,084.05	3,252.15

Invoice 902692258
Repeat Printout

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804082001 /							
	ORDERED BY:TOMMY W/ BELTERS							
160	554125	RT BLT / GSRT ARRESTOR / ENARDO E6104600	3	EA	67.48 /EA	10.00%	60.73	182.19
	/Shipment 804082001 /							
	ORDERED BY:TOMMY W/ BELTERS							
170	387755	FLANGE THREADED 2 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	3	EA	133.00 /EA	90.15%	13.10	39.30
	/Shipment 804105540 /							
	ORDERED BY:TOMMY W/ BELTERS							
180	85830	GASKET SPIRAL WOUND 4 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPHITE FILLER	10	EA	6.10 /EA	73.28%	1.63	16.30
	/Shipment 804105540 /							
	ORDERED BY:TOMMY W/ BELTERS							
190	72035	GASKET DIE CUT RAISED FACE 2 IN 150 ANSI 1/16 IN THICK NON-ASBESTOS	3	EA	0.96 /EA	55.21%	0.43	1.29
	/Shipment 804105540 /							
	ORDERED BY:TOMMY W/ BELTERS							
200	65183	STUD 5/8 IN X 4 IN B7 W/TWO 2E NUTS ALLOY STEEL ASTM A193/A194	70	EA	2.63 /EA	67.68%	0.85	59.50
	/Shipment 804105540 /							
	ORDERED BY:TOMMY W/ BELTERS							
210	3490	NIPPLE 1/2 IN X 1-1/2 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	14.60 /EA	93.29%	0.98	0.98
	/Shipment 804105540 /							
220	106611	TAPE THREAD SEALER TEFLON 1 X 1296 IN ROLL	6	EA	11.33 /EA	78.02%	2.49	14.94
	/Shipment 804105540 /							
230	67987	CMPD TED KOPR KOTE BRUSH TOP 1 CAN / JETLUBE 10004	1	EA	22.18 /EA	46.53%	11.86	11.86
	/Shipment 804105540 /							
240	3809	UNION WING 4 IN FIG 200 2000 LB CWP THREADED	2	EA	196.04 /EA	66.03%	66.59	133.18
	/Shipment 804105540 /							
250	ZNIPP50	UBOLT 4IN RG 1/2 W/ 2 NUTS	4	EA			9.07	36.28
	/Shipment 804099135 /							

Invoice 902692258
Repeat Printout

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
260	63646	CROSS 4 IN THREADED 150 LB MALLEABLE IRON BLACK	1	EA	522.69 /EA	74.91%	131.13	131.13
	/Shipment 804105540 /							
270	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	4	EA	146.63 /EA	86.48%	19.82	79.28
	/Shipment 804105540 /							
280	3667	ELBOW 4 IN 90 DEG LONG RADIUS STD BUTTWELD CARBON STEEL ASTM A234 WPB	2	EA	173.00 /EA	85.24%	25.53	51.06
	/Shipment 804105540 /							
290	3490	NIPPLE 1/2 IN X 1-1/2 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	3	EA	14.60 /EA	93.29%	0.98	2.94
	/Shipment 804105540 /							
300	4368	SWAGE 4 IN X 3 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	2	EA	215.89 /EA	85.63%	31.02	62.04
	/Shipment 804105540 /							
310	71391	BOLT U 4 IN WITH 4 NUTS GALVANIZED FIG 137	1	EA	22.61 /EA	80.01%	4.52	4.52
	/Shipment 804105538 /							
320	19075	LUB OIL CUTTG DR 1 GAL / RIDGID 70830	1	EA	19.30 /EA	15.03%	16.40	16.40
	/Shipment 804105540 /							
330	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	1	EA	335.13 /EA	85.63%	48.16	48.16
	/Shipment 804105563 /							
340	70647	VLV BL 1 IN TED 3000 RP CS BD 316 SS / BALON LM10361	1	EA	86.00 /EA	42.00%	49.88	49.88
	/Shipment 804105563 /							
350	84479	GGE 2-1/2 IN 30 OZ 1/4 IN LM DRY CS / WIKA 9851747	1	EA	58.05 /EA	47.10%	30.71	30.71
	/Shipment 804105563 /							
360	74695	PIPE 1 S40 ERW GLOBALLY SOURCED APISL THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.133 WALL THK 1.70 WT/FT	25.000	FT	5.73 /FT	55.85%	2.53	63.25
	/Shipment 804105563 /							
370	74417	CAP EXHAUST 1-1/4 IN - 1-7/16 IN OD PIPE 12 CTN 11002 MODEL NO 1	1	EA	7.19 /EA	10.01%	6.47	6.47
	/Shipment 804105563 /							

Invoice 902692258
Repeat Printout

Item	Material	Description		Qty	UM	Unit Price	Disc%	Net Price	Net Total
380	89534	BUSHING HEX 1 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105		1	EA	10.85 /EA	85.99%	1.52	1.52
	/Shipment 804105563 /								
390	72871	TUBING METAL 3/8 IN 0.035 WELD T304 STAINLESS STEEL 300 FT COIL		300.000	FT	2.61 /FT	70.11%	0.78	234.00
	/Shipment 804105563 /								
400	145311	TUBING METAL 1/2 IN 0.035 WELD 304 STAINLESS STEEL COIL		300	EA	3.07 /FT	70.36%	0.91	273.00
	/Shipment 804105563 /								
410	390628	EL 3/8 IN TB X 1/4 IN MNPT 90D CS ZINC P / SSP	ISU6MS4	1	EA	14.76 /EA	46.21%	7.94	7.94
	/Shipment 804105563 /								
420	390623	CONN 3/8 IN TB X 1/4 IN MNPT CS ZINC PL / SSP	ISU6MC4	1	EA	8.84 /EA	46.27%	4.75	4.75
	/Shipment 804105563 /								
430	390624	EL 1/2 IN TB X 1/2 IN MNPT 90D CS ZINC P / SSP	ISU8MS8	2	EA	20.08 /EA	46.22%	10.80	21.60
	/Shipment 804105563 /								
440	390568	CONN 1/2 IN TB X 1/2 IN MNPT CS ZINC PL / SSP	ISU8MC8	6	EA	9.08 /EA	46.26%	4.88	29.28
	/Shipment 804105563 /								
450	89527	BUSHING HEX 1/2 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105		3	EA	5.42 /EA	85.98%	0.76	2.28
	/Shipment 804105563 /								
460	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK		2	EA	206.29 /EA	81.25%	38.68	77.36
	/Shipment 804105563 /								
470	89536	BUSHING HEX 1 IN X 1/2 IN THREADED FORGED-STEEL ASTM A105		4	EA	10.85 /EA	85.99%	1.52	6.08
	/Shipment 804105563 /								
480	69423	EM GGE 2-1/2 IN 200 PSI 1/4 IN LM LF BRS / WIKA	9310720	2	EA	64.65 /EA	57.00%	27.80	55.60
	/Shipment 804105563 /								
490	3493	NIPPLE 1/2 IN X 3 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK		4	EA	19.55 /EA	93.30%	1.31	5.24
	/Shipment 804105563 /								
500	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT		25.000	FT	36.82 /FT	55.89%	16.24	406.00
	/Shipment 804105563 /								

Invoice 902692258
Repeat Printout

Item Subtotal	14,621.90
Subtotal for Discounts	875.14-
Subtotal for Taxes	756.07
Invoice Amount	14,502.83

Pricing Include
CONTRACT ADJUSTMENT 875.14-

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD
Please Mail Checks To: NATIONAL OILWELL VARCO, L.P., P.O. BOX 200838, DALLAS TX 75320-0838
Wire Transfer Funds to Wells Fargo Bank, Houston ABA No: 121000248 Account No: 4159795772

No Electronic Signature Available

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111
** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Packing Slip 300939213

Customer PO	Sales Order	Shipment	Packing Slip	**** THIS IS NOT AN INVOICE DO NOT PAY FROM THIS DOCUMENT ****	Date: 12/02/2010
	8236534	804137163			

Bill to	Ship To	Interim Ship To
Cust Num: 126063 CHESAPEAKE OPERATING - EDI PO Box 548806 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI OCL WEATHERFORD OK 73096	

PROPERTY NUMBER:622200 MISC:REPLACING HATCHES	LEASE WELL NAME:GWENDOLYN 1-22H INVOICE DESCRIPTION:PRODUCT OR SERVICE	ORDERED BY:DUSTIN W/CANYON/JAY JARVIS

Sort Seq: Order Confirmation

Item	Material	Description		Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	555930	HATCH THIEF ES660 / ENARDO	4530225	2	EA			495.12	990.24
20	555928	KT RETRO FIT ES660 / ENARDO	E4539303	2	EA			414.74	829.48

Item Subtotal	1,819.72
Subtotal for Taxes	100.08
Packing Slip Amount	1,919.80

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111

** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

NATIONAL OILWELL VARCO

Invoice 902692696

Customer PO	Sales Order	Shipment	Packing Slip	Thank you for your prompt payment	Date: 11/23/2010
gwendolyn 2-22h	8210273	Refer to Item	300919703		

Bill to	Ship To	Interim Ship To
Cust Num: 128063 CHESAPEAKE OPERATING - EDI PO Box 54SS06 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI ocl weatherford OK 73096	

PROPERTY NUMBER:629063	LEASE WELL NAME:GWENDOLYN 2-22H	ORDERED BY:DUSTIN W/CANYON
MISC:SEPARATOR TO INCENTATOR	INVOICE DESCRIPTION:PRODUCT OR SERVICE	

Sort Seq: Order Confirmation

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	74698	PIPE 4 S40 ERW GLOBALLY SOURCED APISL THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL TEK 11.00 WT/FT	200.000	FT	36.82 /FT	55.89%	16.24	3,248.00
	/Shipment 804105193 /							
21	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	2	EA	206.29 /EA	81.25%	38.68	77.36
	Notes: jordan will pick up today thanks							
	/Shipment 804093023 /							
		jordan will pick up today						
		thanks						
22	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	3	EA	206.29 /EA	81.25%	38.68	116.04
	/Shipment 804105193 /							
40	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	2	EA	214.45 /EA		214.45	428.90
	/Shipment 804105193 /							
50	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	1	EA	146.63 /EA	86.48%	19.82	19.82
	/Shipment 804105193 /							
60	387758	FLANGE THREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	4	EA	146.99 /EA	90.15%	14.48	57.92
	/Shipment 804105193 /							
70	85830	GASKET SPIRAL WOUND 4 IN 150 ANSI 304 STAINLESS STEEL WINDING	3	EA	6.10 /EA	73.28%	1.63	4.89

NATIONAL OILWELL VARCO

Invoice 902692696

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
		GRAPHITE FILLER						
	/Shipment	804105193 /						
80	4378	SWAGE 4 IN X 2 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	2	EA	235.16 /EA	85.63%	33.79	67.58
	/Shipment	804105193 /						
100	3533	NIPPLE 2 IN X CLOSE THREADED-BOTH-ENDS XH CARBON STEEL ASTM A106 B BLACK	2	EA	39.32 /EA	93.31%	2.63	5.26
	/Shipment	804105193 /						
110	46012	NIPPLE 4 IN X 6 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	2	EA	332.10 /EA	92.35%	25.42	50.84
	/Shipment	804105193 /						
120	3464	NIPPLE 4 IN X 8 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	2	EA	57.46 /EA	66.67%	19.15	38.30
	/Shipment	804105193 /						
130	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	2	EA	65.47 /EA	66.67%	21.82	43.64
	/Shipment	804105193 /						
140	3556	NIPPLE 4 IN X 12 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	2	EA	535.93 /EA	93.30%	35.91	71.82
	/Shipment	804105193 /						
160	70647	VLV BL 1 IN TED 3000 RP CS BD 316 SS / BALON LM10361	2	EA	47.87 /EA		47.87	95.74
	/Shipment	804105193 /						
170	3667	ELBOW 4 IN 90 DEG LONG RADIUS STD BUTTWELD CARBON STEEL ASTM A234 WPB	1	EA	173.00 /EA	85.24%	25.53	25.53
	/Shipment	804105193 /						
180	3463	NIPPLE 4 IN X 6 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	8	EA	49.82 /EA	66.66%	16.61	132.88
	/Shipment	804105193 /						
190	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	8	EA	325.37 /EA	81.25%	61.01	488.08
	Notes: we picked up on sat 11.20.10							
	/Shipment	804105194 /						

NATIONAL OILWELL VARCO

Invoice 902692696

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
		we picked up on sat 11.20.10						
200	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	3	EA	206.29 /EA	81.25%	38.68	116.04
	/Shipment 804105193 /							
210	63646	CROSS 4 IN THREADED 150 LB MALLEABLE IRON BLACK	1	EA	522.69 /EA	74.91%	131.13	131.13
	Notes: we picked up sat 11.20.10							
	/Shipment 804105194 /							
		we picked up sat 11.20.10						
220	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	75.000	FT	36.82 /FT	55.89%	16.24	1,218.00
	/Shipment 804105193 /							
230	67987	CMPD THD KOPR KOTE BRUSH TOP 1 CAN / JETLUBE 10004	1	EA	22.18 /EA	46.53%	11.86	11.86
	/Shipment 804105193 /							
240	106611	TAPE THREAD SEALER TEFLON 1 X 1296 IN ROLL	9	EA	11.33 /EA	78.02%	2.49	22.41
	/Shipment 804105193 /							
250	89642	FLANGE THREADED 2 IN 150 ANSI US MANUFACTURER RAISED FACE CARBON STEEL ASTM A105	1	EA	133.00 /EA	87.80%	16.23	16.23
	/Shipment 804105193 /							
260	85825	GASKET SPIRAL WOUND 2 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPHITE FILLER	2	EA	4.45 /EA	73.26%	1.19	2.38
	/Shipment 804105193 /							
270	89645	FLANGE THREADED 4 IN 150 ANSI US MANUFACTURER RAISED FACE CARBON STEEL ASTM A105	10	EA	191.00 /EA	87.80%	23.30	233.00
	/Shipment 804105193 /							
280	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	75.000	FT	36.82 /FT	55.89%	16.24	1,218.00
	/Shipment 804105193 /							
290	89578	ELBOW 2 IN 90 DEGREE CLASS 2000 THREADED FORGED-STEEL ASTM A105	1	EA	78.34 /EA	86.00%	10.97	10.97
	/Shipment 804105193 /							

NATIONAL OILWELL VARCO

Invoice 902692696

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
300	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2E NUTS ALLOY STEEL ASTM A193/A194	19	EA	2.75 /EA	67.64%	0.89	16.91
	/Shipment 804105193 /							
310	3809	UNION WING 4 IN FIG 200 2000 LB CWP THREADED	1	EA	196.04 /EA	66.03%	66.59	66.59
	/Shipment 804105193 /							
320	89565	COUPLING 2 IN CLASS 3000 THREADED FORGED-STEEL ASTM A105	1	EA	44.89 /EA	86.01%	6.28	6.28
	/Shipment 804105193 /							
330	121553	LNR GLV POLY/COTTON / LIBERTYGLV 4517	48	PR	1.78 /PR	66.85%	0.59	28.32
	/Shipment 804105193 /							
340	46012	NIPPLE 4 IN X 6 IN THREADED BOTH ENDS SEAMLESS MI CARBON STEEL ASTM A106B BLACK	4	EA	332.10 /EA	92.35%	25.42	101.68
	/Shipment 804105193 /							
350	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	1	EA	146.63 /EA	86.48%	19.82	19.82
	/Shipment 804105193 /							
360	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	76.74 /EA	66.67%	25.58	102.32
	/Shipment 804105193 /							
370	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	2	EA	315.00 /EA	36.37%	200.45	400.90
	/Shipment 804105193 /							
380	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	1	EA	335.13 /EA	85.63%	48.16	48.16
	/Shipment 804105193 /							
390	4378	SWAGE 4 IN X 2 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	2	EA	235.16 /EA	85.63%	33.79	67.58
	/Shipment 804105193 /							
400	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	2	EA	206.29 /EA	81.25%	38.68	77.36
	/Shipment 804105193 /							
410	554123	VLV VENT 950 16 OZ ALUM / ENARDO 950	2	EA	1,749.82 /EA	34.00%	1,154.88	2,309.76
	/Shipment 804105193 /							
420	298348	ARRESTOR FLAME 2 IN FF MDL ENR 70802-AAF / ENARDO 70802AAF	2	EA	1,204.50 /EA	10.00%	1,084.05	2,168.10
	/Shipment 804105193 /							

Invoice 902692696

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
430	554124	SPR GLV STL / ENARDO E4503100	2	EA	53.98 /EA	10.00%	48.58	97.16
	/Shipment 804105193 /							
450	85830	GASKET SPIRAL WOUND 4 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPHITE FILLER	7	EA	6.10 /EA	73.28%	1.63	11.41
	/Shipment 804105193 /							
460	63646	CROSS 4 IN THREADED 150 LB MALLEABLE IRON BLACK	1	EA	522.69 /EA	74.91%	131.13	131.13
	/Shipment 804105193 /							
470	74695	PIPE 1 S40 ERW GLOBALLY SOURCED APISL THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.133 WALL THK 1.70 WT/FT	25.000	FT	5.73 /FT	55.85%	2.53	63.25
	/Shipment 804105193 /							
480	74417	CAP EXHAUST 1-1/4 IN - 1-7/16 IN OD PIPE 12 CTN 11002 MODEL NO 1	1	EA	7.19 /EA	10.01%	6.47	6.47
	/Shipment 804105193 /							
490	72871	TUBING METAL 3/8 IN 0.035 WELD T304 STAINLESS STEEL 300 FT COIL	300.000	FT	2.61 /FT	70.11%	0.78	234.00
	/Shipment 804105193 /							
500	145311	TUBING METAL 1/2 IN 0.035 WELD 304 STAINLESS STEEL COIL	300	EA	3.07 /FT	70.36%	0.91	273.00
	/Shipment 804105193 /							
510	390628	EL 3/8 IN TB X 1/4 IN MNPT 90D CS ZINC P / SSP ISU6ME4	2	EA	14.76 /EA	46.21%	7.94	15.88
	/Shipment 804105193 /							
520	390623	CONN 3/8 IN TB X 1/4 IN MNPT CS ZINC PL / SSP ISU6MC4	1	EA	8.84 /EA	46.27%	4.75	4.75
	/Shipment 804105193 /							
530	390624	EL 1/2 IN TB X 1/2 IN MNPT 90D CS ZINC P / SSP ISU8ME8	2	EA	20.08 /EA	46.22%	10.80	21.60
	/Shipment 804105193 /							
540	390568	CONN 1/2 IN TB X 1/2 IN MNPT CS ZINC PL / SSP ISU8MC8	6	EA	9.08 /EA	46.26%	4.88	29.28
	/Shipment 804105193 /							
550	89527	BUSHING HEX 1/2 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105	1	EA	5.42 /EA	85.98%	0.76	0.76
	/Shipment 804105193 /							
560	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	2	EA	206.29 /EA	81.25%	38.68	77.36
	/Shipment 804105193 /							
570	89575	ELBOW 1 IN 90D CLASS 2000 THREADED FORGED STEEL ASTM A105	2	EA	23.42 /EA	85.99%	3.28	6.56

Invoice 902692696

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105193 /							

Item Subtotal	14,339.01
Subtotal for Discounts	860.34-
Subtotal for Taxes	741.33
Invoice Amount	14,220.00

Pricing Include
CONTRACT ADJUSTMENT 860.34-

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD
Please Mail Checks To: NATIONAL OILWELL VARCO, L.P., P.O. BOX 200838, DALLAS TX 75320-0838
Wire Transfer Funds to Wells Fargo Bank, Houston ABA No: 121000248 Account No: 4159795772

No Electronic Signature Available

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111
** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Invoice 902692197

Customer PO	Sales Order	Shipment	Packing Slip	Thank you for your prompt payment	Date: 11/22/2010
kast trust 1-22h	8210411	Refer to Item	300919180		

Bill to	Ship To	Interim Ship To
Cust Num: 128063 CHESAPEAKE OPERATING - EDI PO Box 54SS06 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI ocl weatherford OK 73096	

PROPERTY NUMBER:622201	LEASE WELL NAME:KAST TRUST 1-22H	ORDERED BY:KEVEN W/CDL
MISC:RE-PLUMB VENT LINES	INVOICE DESCRIPTION:PRODUCT OR SERVICE	

Sort Seq: Order Confirmation

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	74698	PIPE 4 S40 ERW GLOBALLY SOURCED APISL TEREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL TER 11.00 WT/FT	75.000	FT	36.82 /FT	55.89%	16.24	1,218.00
	/Shipment 804105296 /							
11	3940	ELBOW 4 IN 90 DEG TEREADED 150 LB MALLEABLE IRON BLACK	2	EA	206.29 /EA	81.25%	38.68	77.36
	Notes: jordan will pick up today thanks							
	/Shipment 804093028 /							
		jordan will pick up today thanks						
12	3940	ELBOW 4 IN 90 DEG TEREADED 150 LB MALLEABLE IRON BLACK	3	EA	206.29 /EA	81.25%	38.68	116.04
	/Shipment 804105296 /							
30	4022	TEE 4 IN TEREADED 150 PSI MALLEABLE IRON BLACK	1	EA	325.37 /EA	81.25%	61.01	61.01
	/Shipment 804105296 /							
40	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	2	EA	214.45 /EA		214.45	428.90
	/Shipment 804105296 /							
60	387758	FLANGE TEREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	3	EA	146.99 /EA	90.15%	14.48	43.44
	/Shipment 804105296 /							
70	85830	GASKET SPIRAL WOUND 4 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPEITE FILLER	3	EA	6.10 /EA	73.28%	1.63	4.89

Invoice 902692197

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105296 /							
90	4368	SWAGE 4 IN X 3 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	1	EA	215.89 /EA	85.63%	31.02	31.02
	/Shipment 804105296 /							
120	3464	NIPPLE 4 IN X 8 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	1	EA	57.46 /EA	66.67%	19.15	19.15
	/Shipment 804105296 /							
130	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	2	EA	65.47 /EA	66.67%	21.82	43.64
	/Shipment 804105296 /							
141	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	2	EA	76.74 /EA	66.67%	25.58	51.16
	/Shipment 804105356 /							
150	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	1	EA	335.13 /EA	85.63%	48.16	48.16
	/Shipment 804105296 /							
160	70647	VLV BL 1 IN TED 3000 RP CS BD 316 SS / BALON LM10361	1	EA	86.00 /EA	47.40%	45.24	45.24
	/Shipment 804105296 /							
180	89615	PLUG HEX 1-1/4 IN THREADED FORGED-STEEL ASTM A105	1	EA	15.12 /EA	85.98%	2.12	2.12
	/Shipment 804105296 /							
190	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISE 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	125.000	FT	36.82 /FT	55.89%	16.24	2,030.00
	/Shipment 804105296 /							
200	554123	VLV VENT 950 16 OZ ALUM / ENARDO 950	2	EA	1,749.82 /EA	34.00%	1,154.88	2,309.76
	/Shipment 804105296 /							
210	298848	ARRESTOR FLAME 2 IN FF MDL ENR 70802-AAF / ENARDO 70802AAF	2	EA	1,204.50 /EA	10.00%	1,084.05	2,168.10
	/Shipment 804105296 /							
241	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2H NUTS ALLOY STEEL ASTM A193/A194	8	EA	2.75 /EA	67.64%	0.89	7.12
	/Shipment 804105356 /							
250	89534	BUSHING HEX 1 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105	2	EA	10.85 /EA	85.99%	1.52	3.04

Invoice 902692197

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105295 /							
260	72066	EM GGE 2-1/2 IN 30 PSI 1/4 IN LM LF BRSS / WIKA 9310681	2	EA	64.65 /EA	67.30%	21.14	42.28
	/Shipment 804105295 /							
270	63646	CROSS 4 IN THREADED 150 LB MALLEABLE IRON BLACK	1	EA	522.69 /EA	74.91%	131.13	131.13
	/Shipment 804105296 /							
280	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	8	EA	325.37 /EA	81.25%	61.01	488.08
	/Shipment 804105356 /							
290	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	2	EA	335.13 /EA	85.63%	48.16	96.32
	/Shipment 804105356 /							
300	90517	VALVE RELIEF VAPOR 2 IN 8 OZ PSI W1392-V-STD	1	EA	342.05 /EA	10.00%	307.84	307.84
	/Shipment 804105296 /							
310	387758	FLANGE THREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	6	EA	146.99 /EA	90.15%	14.48	86.88
	/Shipment 804105295 /							
320	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	5	EA	146.63 /EA	86.48%	19.82	99.10
	/Shipment 804105296 /							
340	85830	GASKET SPIRAL WOUND 4 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPHITE FILLER	12	EA	6.10 /EA	73.28%	1.63	19.56
	/Shipment 804105296 /							
350	89645	FLANGE THREADED 4 IN 150 ANSI US MANUFACTURER RAISED FACE CARBON STEEL ASTM A105	7	EA	191.00 /EA	87.80%	23.30	163.10
	/Shipment 804105296 /							
360	89536	BUSHING HEX 1 IN X 1/2 IN THREADED FORGED-STEEL ASTM A105	1	EA	10.85 /EA	85.99%	1.52	1.52
	/Shipment 804105296 /							
390	89617	TEE 1/4 IN CLASS 2000 THREADED FORGED STEEL ASTM A105 WPB	2	EA	21.03 /EA	86.02%	2.94	5.88
	/Shipment 804105296 /							
400	89625	TEE 2 IN CLASS 2000 THREADED FORGED STEEL ASTM A105 WPB	1	EA	101.73 /EA	86.00%	14.24	14.24
	/Shipment 804105296 /							
410	76826	TIE CABLE ULTRAVIOLET 15 IN BLACK PIG 100 HEAVY DUTY DOUBLE	1	EA	16.64 /EA	38.28%	10.27	10.27

Invoice 902692197

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105296 /							
420	74695	PIPE 1 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.133 WALL THK 1.70 WT/FT	25.000	FT	5.73 /FT	55.85%	2.53	63.25
	/Shipment 804105296 /							
440	3463	NIPPLE 4 IN X 6 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	1	EA	49.82 /EA	66.66%	16.61	16.61
	/Shipment 804105296 /							
450	3464	NIPPLE 4 IN X 8 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	57.46 /EA	66.67%	19.15	76.60
	/Shipment 804105296 /							
460	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	3	EA	65.47 /EA	66.67%	21.82	65.46
	/Shipment 804105296 /							
471	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	76.74 /EA	66.67%	25.58	102.32
	/Shipment 804105356 /							
480	3472	NIPPLE 1/4 IN X 2 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	28.18 /EA	93.29%	1.89	1.89
	/Shipment 804105296 /							
490	3474	NIPPLE 1/4 IN X 3 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	34.15 /EA	93.29%	2.29	2.29
	/Shipment 804105296 /							
500	3475	NIPPLE 1/4 IN X 4 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	42.01 /EA	93.31%	2.81	2.81
	/Shipment 804105296 /							
520	3478	NIPPLE 1/4 IN X 8 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	83.13 /EA	93.30%	5.57	5.57
	/Shipment 804105296 /							
530	19075	LUB OIL CUTTG DR 1 GAL / RIDGID 70830	1	EA	19.30 /EA	15.03%	16.40	16.40
	/Shipment 804105296 /							

Invoice 902692197

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
540	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2H NUTS ALLOY STEEL ASTM A193/A194	115	EA	2.75 /EA	67.64%	0.89	102.35
	/Shipment 804105296 /							
550	543981	HATCH THIEF & ACC / ENARDO 560A16	1	EA	467.35 /EA	10.00%	421.06	421.06
	/Shipment 804105296 /							

Item Subtotal	11,050.96
Subtotal for Discounts	663.06-
Subtotal for Taxes	571.33
Invoice Amount	10,959.23

Pricing Include
CONTRACT ADJUSTMENT 663.06-

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD
Please Mail Checks To: NATIONAL OILWELL VARCO, L.P., P.O. BOX 200838, DALLAS TX 75320-0838
Wire Transfer Funds to Wells Fargo Bank, Houston ABA No: 121000248 Account No: 4159795772

No Electronic Signature Available

Invoice 902692220

Customer PO	Sales Order	Shipment	Packing Slip	Thank you for your prompt payment	Date: 11/22/2010
kast trust 2-22h	8210260	Refer to Item	300919232		

Bill to	Ship To	Interim Ship To
Cust Num: 128063 CHESAPEAKE OPERATING - EDI PO Box 548806 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI oci weatherford OK 73096	

PROPERTY NUMBER:629062	LEASE WELL NAME:KAST TRUST 2-22E	ORDERED BY:KEVEN W/CDL
MISC:RE-PLUMB VENT LINES	INVOICE DESCRIPTION:PRODUCT OR SERVICE	

Sort Seq: Order Confirmation

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	125.000	FT	36.82 /FT	55.89%	16.24	2,030.00
	/Shipment 804105270 /							
20	70321	HM CMPD TED SLNT W/PTFE 30561 / PERMATEX 30561	4	EA	20.62 /EA	41.80%	12.00	48.00
	/Shipment 804105270 /							
30	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	8	EA	325.37 /EA	81.25%	61.01	488.08
	/Shipment 804105270 /							
40	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	2	EA	206.29 /EA	81.25%	38.68	77.36
	Notes: jordan will pick up thanks							
	/Shipment 804093018 /	jordan will pick up thanks						
41	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	4	EA	206.29 /EA	81.25%	38.68	154.72
	/Shipment 804105270 /							
50	4278	SWAGE 4 IN X 2 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	4	EA	235.16 /EA	85.63%	33.79	135.16
	/Shipment 804105270 /							
60	4368	SWAGE 4 IN X 3 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	2	EA	215.89 /EA	85.63%	31.02	62.04

Invoice 902692220

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment	804105270 /						
70	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	2	EA	214.45 /EA		214.45	428.90
	/Shipment	804105270 /						
80	387758	FLANGE THREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	4	EA	146.99 /EA	90.15%	14.48	57.92
	/Shipment	804105270 /						
90	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	6	EA	146.63 /EA	86.48%	19.82	118.92
	/Shipment	804105270 /						
110	65183	STUD 5/8 IN X 4 IN B7 W/TWO 2E NUTS ALLOY STEEL ASTM A193/A194	60	EA	2.63 /EA	67.68%	0.85	51.00
	/Shipment	804105404 /						
111	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2E NUTS ALLOY STEEL ASTM A193/A194	24	EA	2.75 /EA	67.64%	0.89	21.36
	/Shipment	804105404 /						
120	554123	VLV VENT 950 16 CZ ALUM / ENARDO 950	2	EA	1,749.82 /EA	34.00%	1,154.88	2,309.76
	/Shipment	804105270 /						
130	298848	ARRESTOR FLAME 2 IN FF MDL ENR 70802-AAF / ENARDO 70802AAF	2	EA	1,204.50 /EA	10.00%	1,084.05	2,168.10
	/Shipment	804105270 /						
150	3462	NIPPLE 4 IN X 4 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	3	EA	40.81 /EA	66.67%	13.60	40.80
	/Shipment	804105270 /						
170	3464	NIPPLE 4 IN X 8 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	57.46 /EA	66.67%	19.15	76.60
	/Shipment	804105270 /						
180	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	65.47 /EA	66.67%	21.82	87.28
	/Shipment	804105270 /						
190	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	2	EA	76.74 /EA	66.67%	25.58	51.16
	/Shipment	804105270 /						
230	106611	TAPE THREAD SEALER TEFLON 1 X 1296 IN ROLL	6	EA	11.33 /EA	78.02%	2.49	14.94

Invoice 902692220

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105270 /							
240	70321	EM CMPD TED SLNT W/PTFE 30561 / PERMATEX 30561	4	EA	20.62 /EA	41.80%	12.00	48.00
	/Shipment 804105270 /							
250	89642	FLANGE TERBADED 2 IN 150 ANSI US MANUFACTURER RAISED FACE CARBON STEEL ASTM A105	2	EA	133.00 /EA	87.80%	16.23	32.46
	/Shipment 804098980 /							
260	85825	GASKET SPIRAL WOUND 2 IN 150 ANSI 304 STAINLESS STEEL WINDING GRAPHITE FILLER	4	EA	4.45 /EA	73.26%	1.19	4.76
	/Shipment 804105270 /							
271	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2E NUTS ALLOY STEEL ASTM A193/A194	12	EA	2.75 /EA	67.64%	0.89	10.68
	/Shipment 804105411 /							
280	555930	HATCH THIEF ES660 / ENARDO 4530225	4	EA	1,049.67 /EA	10.00%	944.70	3,778.80
	/Shipment 804105420 /							
290	555929	KT RETRO FIT ES660 / ENARDO E4539303	4	EA	792.88 /EA	10.00%	713.59	2,854.36
	/Shipment 804105270 /							
300	554126	GSKT ES660 B-N / ENARDO E4509100	4	EA	291.85 /EA	10.00%	262.66	1,050.64
	/Shipment 804105270 /							
320	71391	BOLT U 4 IN WITH 4 NUTS GALVANIZED FIG 137	4	EA	22.61 /EA	80.01%	4.52	18.08
	/Shipment 804104769 /							
330	89534	BUSHING HEX 1 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105	1	EA	10.85 /EA	85.99%	1.52	1.52
	/Shipment 804105270 /							
340	72066	EM GGE 2-1/2 IN 30 PSI 1/4 IN LM LF BRSS / WIKA 9310681	2	EA	64.65 /EA	67.30%	21.14	42.28
	/Shipment 804105270 /							
360	65013	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS STD CARBON STEEL	2	EA	335.13 /EA	85.63%	48.16	96.32
	/Shipment 804105270 /							
370	70647	VLV BL 1 IN TED 3000 RP CS BD 316 SS / BALON LM10361	2	EA	86.00 /EA	47.40%	45.24	90.48
	/Shipment 804105270 /							
380	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	1	EA	315.00 /EA	36.37%	200.45	200.45
	/Shipment 804105270 /							
390	89645	FLANGE TERBADED 4 IN 150 ANSI US MANUFACTURER RAISED FACE CARBON	11	EA	191.00 /EA	87.80%	23.30	256.30

Invoice 902692220

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
		STEEL ASTM A105						
	/Shipment	804105270 /						
400	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	12	EA	146.63 /EA	86.48%	19.82	237.84
	/Shipment	804105270 /						
410	65181	STUD 5/8 IN X 3-1/2 IN B7 W/TWO 2H NUTS ALLOY STEEL ASTM A193/A194	30	EA	2.42 /EA	67.77%	0.78	52.40
	/Shipment	804105270 /						
420	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	200.000	FT	36.82 /FT	55.89%	16.24	3,248.00
	/Shipment	804105270 /						
431	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	4	EA	325.37 /EA	81.25%	61.01	244.04
	/Shipment	804098980 /						
440	3553	NIPPLE 4 IN X 4 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	4	EA	265.69 /EA	93.30%	17.80	71.20
	/Shipment	804105270 /						
450	3463	NIPPLE 4 IN X 6 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	49.82 /EA	66.66%	16.61	66.44
	/Shipment	804105270 /						
460	3554	NIPPLE 4 IN X 8 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	2	EA	404.67 /EA	93.30%	27.11	54.22
	/Shipment	804105270 /						
470	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	65.47 /EA	66.67%	21.82	87.28
	/Shipment	804105270 /						
500	4368	SWAGE 4 IN X 3 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	1	EA	215.89 /EA	85.63%	31.02	31.02
	/Shipment	804105270 /						
510	68925	REG PRSR 1/4 IN 0-35PSI CELL FLTR / FISHER 67CFR224	1	EA	64.66 /EA	19.61%	51.98	51.98
	/Shipment	804105270 /						
520	76826	TIE CABLE ULTRAVIOLET 15 IN BLACK PIG 100 HEAVY DUTY DOUBLE	1	EA	16.64 /EA	38.28%	10.27	10.27

Invoice 902692220

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
	/Shipment 804105270 /							
530	74695	PIPE 1 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.133 WALL THK 1.70 WT/FT	25.000	FT	5.73 /FT	55.85%	2.53	63.25
	/Shipment 804105270 /							
540	3472	NIPPLE 1/4 IN X 2 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	28.18 /EA	93.29%	1.89	1.89
	/Shipment 804105270 /							
550	3474	NIPPLE 1/4 IN X 3 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	34.15 /EA	93.29%	2.29	2.29
	/Shipment 804105270 /							
560	3475	NIPPLE 1/4 IN X 4 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	42.01 /EA	93.31%	2.81	2.81
	/Shipment 804105270 /							
570	3477	NIPPLE 1/4 IN X 6 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	73.02 /EA	93.30%	4.89	4.89
	/Shipment 804105270 /							
580	89617	TEE 1/4 IN CLASS 2000 THREADED FORGED STEEL ASTM A105 WPB	2	EA	21.03 /EA	86.02%	2.94	5.88
	/Shipment 804105270 /							
590	19075	LUB OIL CUTTG DR 1 GAL / RIDGID 70830	1	EA	19.30 /EA	15.03%	16.40	16.40
	/Shipment 804105270 /							

Item Subtotal	21,169.33
Subtotal for Discounts	1,270.16-
Subtotal for Taxes	1,094.45
Invoice Amount	20,993.62

Pricing Include
CONTRACT ADJUSTMENT 1,270.16-

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111
** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Invoice 902692220

Please Mail Checks To: NATIONAL OILWELL VARCO, L.P., P.O. BOX 200838, DALLAS TX 75320-0838
Wire Transfer Funds to Wells Fargo Bank, Houston ABA No: 121000248 Account No: 4159795772

No Electronic Signature Available

Invoice 902692184

Customer PO	Sales Order	Shipment	Packing Slip	Thank you for your prompt payment	Date: 11/22/2010
MILLER 1-21H	8215809	804105305	300919146		

Bill to	Ship To	Interim Ship To
Cust Num: 128063 CHESAPEAKE OPERATING - EDI PO Box 548806 OKLAHOMA CITY OK 73154	CHESAPEAKE OPERATING - EDI OSCL WEATHERFORD OK 73096	

PROPERTY NUMBER:625143	LEASE WELL NAME:MILLER 1-21H	ORDERED BY:TOMMY W/ BELTERS//JAY JARVIS
MISC:REPLUMB VENT LINES/PLUMB SEP	INVOICE DESCRIPTION:PRODUCT OR SERVICE	

Sort Seq: Order Confirmation

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
10	6102	PIPE 4 S40 SML GLOBALLY SOURCED A106B BEVELED ENDS MILL VARNISH SRL CARBON STEEL STD 0.237 WALL TEK 10.8 WT/FT	175.000	FT	33.21 /FT	55.89%	14.65	2,563.75
20	3940	ELBOW 4 IN 90 DEG THREADED 150 LB MALLEABLE IRON BLACK	3	EA	206.29 /EA	81.25%	38.68	116.04
30	4022	TEE 4 IN THREADED 150 PSI MALLEABLE IRON BLACK	6	EA	325.37 /EA	81.25%	61.01	366.06
40	166815	VLV BL 4 IN TED 750 RP DI BD CS TRM / BALON 4RS32UNI	2	EA	315.00 /EA	36.37%	200.45	400.90
50	387784	FLANGE WELDNECK 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE STD CARBON STEEL ASTM A105	3	EA	146.63 /EA	86.48%	19.82	59.46
60	387758	FLANGE THREADED 4 IN 150 ANSI GLOBALLY SOURCED RAISED FACE CARBON STEEL ASTM A105	10	EA	146.99 /EA	90.15%	14.48	144.80
70	4378	SWAGE 4 IN X 2 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	1	EA	235.16 /EA	85.63%	33.79	33.79
80	4368	SWAGE 4 IN X 3 IN THREADED-BOTH-ENDS STD CARBON STEEL ASTM A234 WPB	1	EA	215.89 /EA	85.63%	31.02	31.02
90	3553	NIPPLE 4 IN X 4 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	2	EA	265.69 /EA	93.30%	17.80	35.60
100	3463	NIPPLE 4 IN X 6 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	5	EA	49.82 /EA	66.66%	16.61	83.05
110	3464	NIPPLE 4 IN X 8 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	1	EA	57.46 /EA	66.67%	19.15	19.15
120	3465	NIPPLE 4 IN X 10 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	4	EA	65.47 /EA	66.67%	21.82	87.28

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111

** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Invoice 902692184

Item	Material	Description	Qty	UM	Unit Price	Disc%	Net Price	Net Total
121	3466	NIPPLE 4 IN X 12 IN THREADED-BOTH-ENDS WELDED STANDARD CARBON STEEL ASTM A53 BLACK	1	EA	76.74 /EA	66.67%	25.58	25.58
141	65003	SWAGE 4 IN X 1 IN THREADED-BOTH-ENDS XH CARBON STEEL	1	EA	410.53 /EA	85.63%	58.99	58.99
150	70647	VLV BL 1 IN TED 3000 RP CS BD 316 SS / BALON LM10361	1	EA	86.00 /EA	47.40%	45.24	45.24
160	74695	PIPE 1 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.133 WALL THK 1.70 WT/FT	25.000	FT	5.73 /FT	55.85%	2.53	63.25
170	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2H NUTS ALLOY STEEL ASTM A193/A194	70	EA	2.75 /EA	67.64%	0.89	62.30
180	554123	VLV VENT 950 16 OZ ALUM / ENARDO 950	2	EA	1,749.82 /EA	34.00%	1,154.88	2,309.76
190	298848	ARRESTOR FLAME 2 IN FF MDL ENR 70802-AAF / ENARDO 70802AAF	2	EA	1,204.50 /EA	10.00%	1,084.05	2,168.10
210	72035	GASKET DIE CUT RAISED FACE 2 IN 150 ANSI 1/16 IN THICK NON-ASBESTOS	4	EA	0.96 /EA	55.21%	0.43	1.72
220	89671	STUD 5/8 IN X 4-1/2 IN B7 W/TWO 2H NUTS ALLOY STEEL ASTM A193/A194	12	EA	2.75 /EA	67.64%	0.89	10.68
230	89534	BUSHING HEX 1 IN X 1/4 IN THREADED FORGED-STEEL ASTM A105	1	EA	10.85 /EA	85.99%	1.52	1.52
240	84479	GGE 2-1/2 IN 30 OZ 1/4 IN LM DRY CS / WIKA 9851747	2	EA	58.05 /EA	47.10%	30.71	61.42
250	63646	CROSS 4 IN THREADED 150 LB MALLEABLE IRON BLACK	1	EA	522.69 /EA	74.91%	131.13	131.13
310	76826	TIE CABLE ULTRAVIOLET 15 IN BLACK PIG 100 HEAVY DUTY DOUBLE	1	EA	16.64 /EA	38.28%	10.27	10.27
330	3474	NIPPLE 1/4 IN X 3 IN THREADED BOTH ENDS SEAMLESS XH CARBON STEEL ASTM A106B BLACK	1	EA	34.15 /EA	93.29%	2.29	2.29
360	543981	HATCH THIEF & ACC / ENARDO 660A16	4	EA	467.85 /EA	10.00%	421.06	1,684.24
370	555929	KT RETRO FIT ES660 / ENARDO E4539303	4	EA	792.88 /EA	10.00%	713.59	2,854.36
400	3667	ELBOW 4 IN 90 DEG LONG RADIUS STD BUTTWELD CARBON STEEL ASTM A234 WPB	2	EA	173.00 /EA	85.24%	25.53	51.06
410	74698	PIPE 4 S40 ERW GLOBALLY SOURCED API5L THREADED & COUPLED W/API CPLGS MILL VARNISH 25 FT CARBON STEEL STD 0.237 WALL THK 11.00 WT/FT	25.000	FT	36.82 /FT	55.89%	16.24	406.00

Item Subtotal	13,888.81
Subtotal for Discounts	833.33-
Subtotal for Taxes	718.05
Invoice Amount	13,773.53

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111

** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Invoice 902692184

Pricing Include
CONTRACT ADJUSTMENT 833.33-

Subject to Terms on Back Payment Terms:Net 60 Days Delivery Terms:FOB SHIPPING POINT Currency: USD
Please Mail Checks To: NATIONAL OILWELL VARCO, L.P., P.O. BOX 200838, DALLAS TX 75320-0838
Wire Transfer Funds to Wells Fargo Bank, Houston ABA No: 121000248 Account No: 4159795772

No Electronic Signature Available

Questions: National Oilwell Varco LP WEATHERFORD OK Phone: (580) 774-1111
** HAZARDOUS MATERIAL D.O.T. 24 HOUR EMERGENCY RESPONSE NUMBER: 1-800-451-8346 **

Chesapeake ENERGY

Regulatory Department

March 1, 2010

VIA CERTIFIED MAIL # 7009 0960 0001 1891 7668

TCEQ
Air Permits Initial Review Team
MC161
P.O. Box 13087
Austin, TX 78711-3087

Re: Permit by Rule Modification Registration Application
Texas Midstream Gas Services, LLC, CN-603104530
PBR Registration No. 82981
Ponder Compressor Station, RN-105354062
Denton County, Texas

Dear Sir or Madam:

Texas Midstream Gas Services, LLC, submitted the referenced registration application for a natural gas compressor station in Denton County on February 26, 2010 without all the required signatures. This submission contains a complete PI-7 CERT form with the required signature.

If you or your staff have any questions, please contact me at (405) 935-4882 or by email at brandi.johnson@chk.com.

Sincerely,

Brandi Johnson
EHS Specialist
Chesapeake Energy

Enclosures

cc: Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, Texas 76118-6951
VIA CERTIFIED MAIL # 7009 0960 0001 1891 7675

Please return Receipt to:
Amanda Rios
One Grand Blvd. #641

7009 0960 0001 1891 7668

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To Ponder, TX
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Ponder, TX

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

TCEQ
Air Permits Initial Review Team
MC161
P.O. Box 13087
Austin, TX 78711-3087

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

MAR 04 2010

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 0960 0001 1891 7668

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Please return Receipt to:
Amanda Rios
One Grand Blvd. #641

7009 0960 0001 1891 7675

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To Ponder, TX
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Ponder TX

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, Texas 76118-6951

COMPLETE THIS SECTION ON DELIVERY

A. Signature
Marilynn Stubits ☐ Agent ☐ Addressee

B. Received by (Printed Name) Marilynn Stubits
C. Date of Delivery 3-3-10

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

MAR - 3 2010

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 0960 0001 1891 7675

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

I. REGISTRANT INFORMATION			
A. TCEQ Customer Reference Number:	CN-603104530	TCEQ Regulated Entity Number:	RN-105354062
Note: If "NO," CN or RN number was entered above; please fill out the required Core Data Form, which will be available in Step II of the submittal process.			
B. Company or Other Legal Customer Name: Texas Midstream Gas Services, LLC			
Company Official Contact Name: Brandi Johnson		Title: EHS Specialist	
Mailing Address: 6100 North Western Ave., P.O. Box 18496			
City: Oklahoma City		State: OK	Zip Code: 73154-0496
Phone No.: 405-935-4882	Fax No.: 405-849-4882	E-mail Address: brandi.johnson@chk.com	
C. Technical Contact Name: Mark Martelli		Title: Consultant	
Company: Flatrock Engineering & Environmental, Ltd			
Mailing Address: 9341 E. Lake Highlands Dr.			
City: Dallas		State: TX	Zip Code: 75218
Phone No.: 214-320-8804	Fax No.: 801-340-4696	E-mail Address: mark.martelli@flatrockenergy.net	
D. Facility Location Information - Street Address: 6501 B Donald Rd, Justin, TX 76247			
If "NO," street address, provide written driving directions to the site: (attach description if additional space is needed)			
From E. Eakin Cemetary Rd/Hwy 156 intersection, north of Justin, take E. Eakin Cemetary Rd west to Tim Donald Rd. Turn left and go 2/3 mi south to site on left.			
City: Ponder	County: Denton	Zip Code: 76247	

II. FACILITY AND SITE INFORMATION			
A. Name and Type of Facility: Ponder Compression Facility./ natural gas production/transportation			☒ Permanent ☐ Portable
B. PBR claimed under **30 TAC § 106** *(List all)*:			
§ 106.352	§ 106.		
§ 106.512	§ 106.		
§ 106.	§ 106.		
Are you claiming a **historical standard exemption or PBR**?			☐ YES ☒ NO
If "YES," enter effective date and Rule Number:			
C. Is there a previous Standard Exemption or PBR for the facility in this registration? (Attach details regarding changes.)			☒ YES ☐ NO
If "YES," enter Registration Number and Rule Number:	*82981*	106.352, 106.512	

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

II. FACILITY AND SITE INFORMATION *(continued)*			
D. Are there any **other facilities** at this **site** which are **authorized by an Air Standard Exemption or PBR**?			☐ YES ☒ NO
If "YES," enter Registration Number and Rule Number:			
E. Are there any **other air preconstruction permits** at this site?			☐ YES ☒ NO
If "YES," enter Permit Numbers:			
Are there any other air preconstruction permits at this site that would be directly associated with this project?			☐ YES ☒ NO
If "YES," enter Permit Numbers:			
F. Is this facility located at a site which is required to obtain a federal operating permit pursuant to 30 TAC Chapter 122?			☐ YES ☒ NO ☐ To be determined
If the site currently has an existing federal operating permit, enter the permit number:			
Identify the requirements of 30 TAC Chapter 122 that will be triggered if this certification is accepted.			
☐ Initial Application for an FOP	☐ Significant Revision for an SOP	☐ Minor Revision for an SOP	
☐ Operational Flexibility/off Permit Notification for an SOP	☐ Revision for GOP	☐ To be Determined	☒ None
Identify the type(s) issued and/or FOP application(s) submitted/pending for the site. *(Check all that apply)*			
☐ SOP	☐ GOP	☐ GOP application/revision application: Submitted or under APD review.	
☐ SOP application/revision application: submitted or under APD review.		☒ N/A	
G. TCEQ Account Identification Number *(if known)*:			
III. FEE INFORMATION			
See Section VI. for address to send fee or go to www.2.tceq.state.tx.us/epay to pay online.			
A. Is this certification to solely establish a federally enforceable emission limit and not authorize any new facilities? If "YES," than no fee is required. If "NO," then go to Section III.B.			☐ YES ☒ NO
B. *If "YES," to any of the following three questions, a **$100** fee is required. Otherwise, a **$450** fee is required.*			
Does this business have less than 100 employees?			☐ YES ☒ NO
Does this business have less than 6 million dollars in annual gross receipts?			☐ YES ☒ NO
Is this registration submitted by a governmental entity with a population of less than 10,000?			☐ YES ☒ NO
C. Check/Money Order or Transaction Number *(Payable to TCEQ)*:		*Was fee **Paid** online?*	☐ YES ☒ NO
Company name of check: Texas Midstream Gas Services	Fee amount:		**$450.00**

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

IV. SELECTED FACILITY REVIEWS ONLY—TECHNICAL INFORMATION	
Note: If claiming one of the following PBRs, complete this section, then skip to Section VI., "Submitting your registration" below: ***Animal Feeding Operations § 106.161, Livestock Auction Facilities § 106.162, Saw Mills § 106.223, Grain Handling, Storage and Drying § 106.283, Auto Body Refinishing Facilities §106.436, and Air Curtain Incinerator § 106.496***	
A. Is the applicable PBR checklist attached which shows the facility meets all general and specific requirements of the PBR(s) being claimed? *(If submitting electronically, click "YES.")*	☐ YES ☐ NO
B. Distance from this facility's emission release point to the nearest property line:	feet
Distance from this facility's emission release point to the nearest off-property structure:	feet

V. TECHNICAL INFORMATION INCLUDING STATE AND FEDERAL REGULATORY REQUIREMENTS ***Registrants must be in compliance with all applicable state and federal regulations and standards to claim a PBR.***	
A. Is confidential information submitted and properly marked "**CONFIDENTIAL**" with this registration?	☐ YES ☒ NO
B. Is a process flow diagram or a process description attached?	☒ YES ☐ NO
C. Are emissions data and calculations for this claim attached?	☒ YES ☐ NO
D. Is information attached showing how the **general** requirements (**30 TAC § 106.4**) of the PBR is met for this Registration? (**PBR checklists** may be used, but are optional)	☒ YES ☐ NO
*Note: Please be reminded that if the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under **30 TAC Chapter 101, Subchapter H, Division 3**, the owner/operator of these facilities must possess NO_x allowances equivalent to the actual NO_x emissions from these facilities.*	
E. Is information attached showing how the **specific PBR** requirements are met for this registration? (***PBR checklist** may be used, but are optional*)	☒ YES ☐ NO
F. Distance from this facility's emission release point to the nearest property line:	40 feet
Distance from this facility's emission release point to the nearest off-property structure:	300 feet
Note: In limited cases, a map or drawing of the site and surrounding land use may be requested during the technical review or at the request of the TCEQ Regional Office or local air pollution control program during an investigation.	

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

VI. SIGNATURE FOR CERTIFICATION AND REGISTRATION

The signature below indicates that the Responsible Official has knowledge of the facts herein set forth and that the same are true, accurate, and complete to the best of my knowledge and belief. By this signature, the maximum emission rates listed on this certification reflect the maximum anticipated emissions due to the operation of this facility and all representations in this certification of emissions are conditions upon which the facilities and sources will operate. It is understood that it is unlawful to vary from these representations unless the certification is first revised. The signature certifies that to the best of the Responsible Official's knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption or permit by rule and the facility will operated in compliance with all regulations of the Texas Commission on Environmental Quality and with Federal U.S. Environmental Protection Agency regulations governing air pollution. The signature below certifies that, based on information and belief formed after reasonable inquiry, the statements and information above and contained in the attached document(s) are true, accurate, and complete. **If you questions on how to fill out this form or about air quality permits. Please call 512/239-1250.** *Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512/239-3282.*

SIGNATURE: _____ 2/26/10

(ORIGINAL SIGNATURE REQUIRED) DATE:

VII. SUBMITTING COPIES OF THE CERTIFICATION AND REGISTRATION

Copies must be sent as listed below:
Processing delays may occur if copies are not sent as noted.

Who	*Where*	*What*
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail MC161, P.O. Box 13087 Austin, Texas 78711-3087 Hand Delivery, Overnight Mail MC 161, 12100 Park 35 Circle, Building C, Third Floor Austin, Texas 78753 Fax No.: (512) 239-2123 *(do not follow fax with paper copies)*	Originals Form PI-7, Core Data Form. and all attachments
Revenue Section, TCEQ	Regular, Certified, Priority Mail MC 214, P.O. Box 13088 Austin, Texas 78711-3088 Hand Delivery, Overnight Mail MC 214, 12100 Park 35 Circle, Building A, Third Floor Austin, Texas 78753	Original Money Order or Check Copy of Form PI-7 and Core Data Form
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ Web site at www.tceq.state.tx.us, or call (512) 239-1250.	Copy of Form PI-7, Core Data Form, and all attachments.
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD Website at www.tceq.state.tx.us/nav/permits/air_permits.html or call (512) 239-1250	Copy of Form PI-7, Core Data Form, and all attachments.

Chesapeake ENERGY

Regulatory Department

August 23, 2010

VIA CERTIFIED MAIL # 7009 0960 0000 6542 0587

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

Re: 30 TAC § 117.2135(d)(1) and NSPS Subpart JJJJ Notification of Testing
Texas Midstream Gas Services (TMGS)
Ponder Compressor Station - RN105354062

To Whom It May Concern:

Per 30 TAC § 117.2135(d)(10) and 40 C.F.R. § 60.8, TMGS is submitting this notification of testing for two compressor engines, MC2209 and MC1973, located at the Ponder Compressor Station in Denton County. Unit MC1973 will be tested according to the requirements of 30 TAC § 117.8000 on October 4, 2010. Unit MC2209 will be tested according to the requirements of 30 TAC § 117.8000 and NSPS Subpart JJJJ on October 5, 2010. If you have any questions, please contact me at (405) 935-6113 or by email at CMAirGroup@chk.com.

Sincerely,

Hillary Moseley

Hillary Moseley
Corporate Air Coordinator - Midstream
Chesapeake Energy

cc: Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
P.O. Box 13087
Austin, Texas 78711-3087
VIA CERTIFIED MAIL # 7009 0960 0000 6542 0594

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, TX 76118-6951
VIA CERTIFIED MAIL # 7009 0960 0000 6542 0600

Field Operations Support Division (FOSP)
TCEQ, MC-174
P.O. Box 13087
Austin, TX 78711-3087
VIA CERTIFIED MAIL # 7009 0960 0000 6542 0617

Please return Receipt to:
Kyle Kauk
One Grand Blvd. #117

7009 0960 0000 6542 0587

Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $

Postmark Here
AUG 23 2010

Sent To Ponder, TX
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Ponder, TX

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X EPA REGION 6
☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery
AUG 25 2010

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

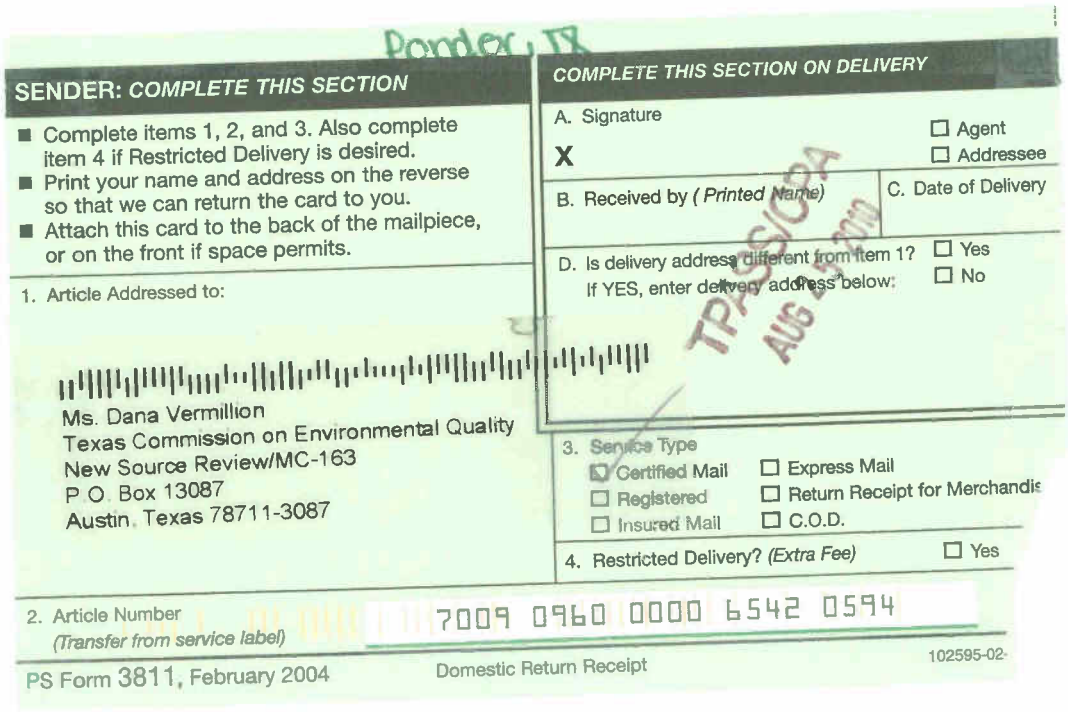
3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7009 0960 0000 6542 0587

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Please return Receipt to:
Kyle Kauk
One Grand Blvd. #117
7009 0960 0000 6542 0594
Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
Postmark Here
AUG 23
OKLAHOMA CITY
USPS 73118-9998
Sent To Ponder, TX
Street, Apt. No.; or PO Box No.
City, State, ZIP+4
PS Form 3800, August 2006
See Reverse for Instructions


Ponder, TX
SENDER: COMPLETE THIS SECTION
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
■ Print your name and address on the reverse so that we can return the card to you.
■ Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
P.O. Box 13087
Austin, Texas 78711-3087
COMPLETE THIS SECTION ON DELIVERY
A. Signature
X
Agent
Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
TPASSIOPA
AUG 27 2010
3. Service Type
Certified Mail
Express Mail
Registered
Return Receipt for Merchandis
Insured Mail
C.O.D.
4. Restricted Delivery? (Extra Fee) Yes
2. Article Number (Transfer from service label)
7009 0960 0000 6542 0594
PS Form 3811, February 2004
Domestic Return Receipt
102595-02-

Please return Receipt to:
Kyle Kauk
One Grand Blvd. #117

7009 0960 0000 6542 0600

Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $

AUG 23 2010
Postmark Here
USPS 73118.9998

Sent To Ponder, TX
Street, Apt. No., or PO Box No.
City, State, ZIP+4

Form 3800, August 2006 See Reverse for Instructions

Ponder, TX

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, TX 76118-6951

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Marilynn Stubbs ☐ Agent ☐ Addressee

B. Received by (Printed Name) Marilynn Stubbs C. Date of Delivery 8/25/10

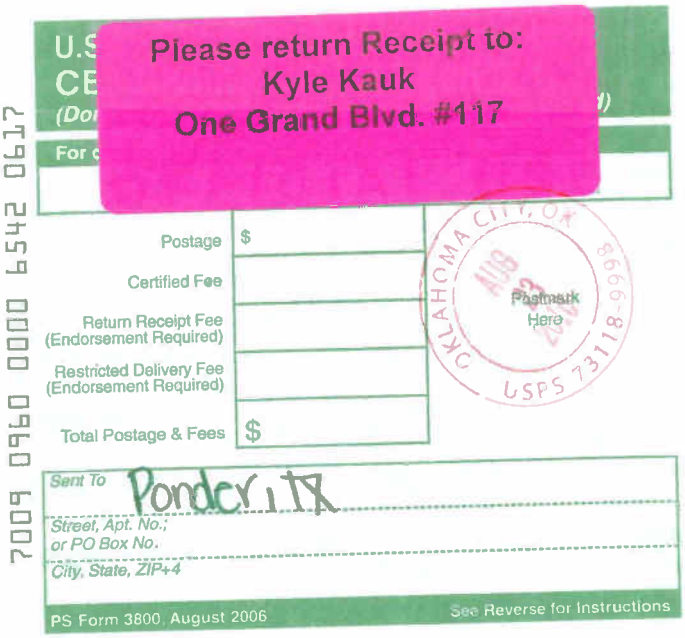
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

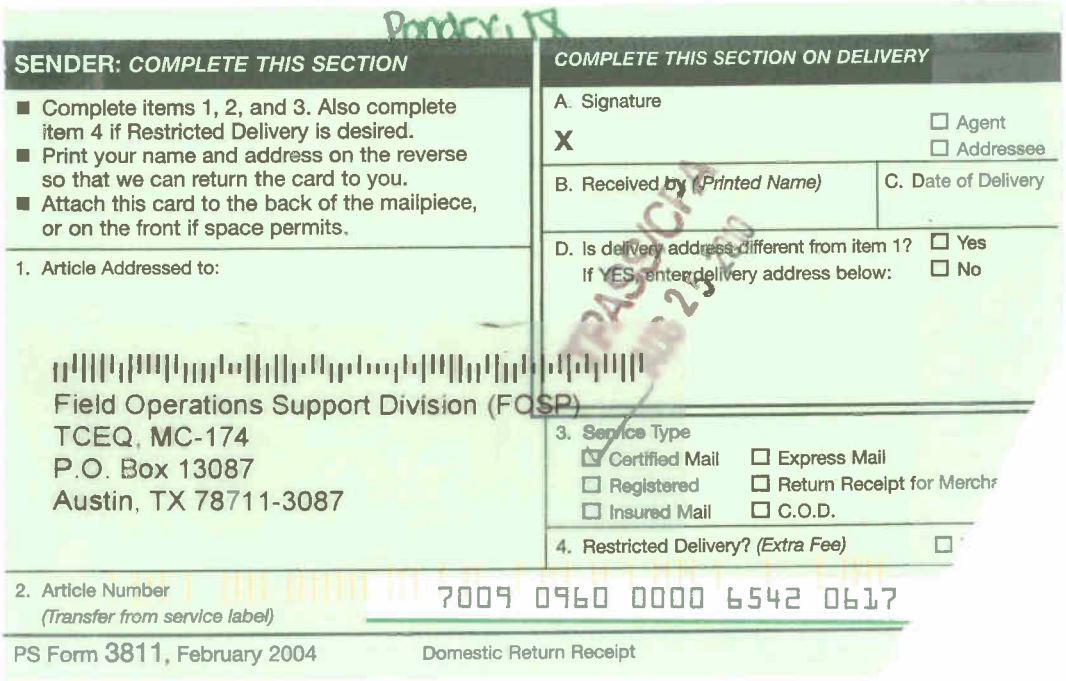
3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 0960 0000 6542 0600

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540


Please return Receipt to:
Kyle Kauk
One Grand Blvd. #117
7009 0960 0000 6542 0617
Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
Postmark Here
OKLAHOMA CITY, OK
USPS 73118-9998
Sent To Ponder, TX
Street, Apt. No.; or PO Box No.
City, State, ZIP+4
PS Form 3800, August 2006
See Reverse for Instructions


Ponder, TX
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1. Article Addressed to:
Field Operations Support Division (FOSP)
TCEQ, MC-174
P.O. Box 13087
Austin, TX 78711-3087
COMPLETE THIS SECTION ON DELIVERY
A. Signature
X
Agent
Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
3. Service Type
Certified Mail
Express Mail
Registered
Return Receipt for Merch
Insured Mail
C.O.D.
4. Restricted Delivery? (Extra Fee)
2. Article Number
(Transfer from service label)
7009 0960 0000 6542 0617
PS Form 3811, February 2004
Domestic Return Receipt

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

July 15, 2011

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: 7004 1160 0003 0359 2915

Mr. Levi Poe
Corporate Air Compliance Manager
Chesapeake Operating, Inc.
P.O. Box 18496
Oklahoma City, Oklahoma 73154

Re: Administrative Compliance Order Docket Number: CAA-06-2011-3328

Dear Mr. Poe:

Enclosed is an Administrative Compliance Order (Order) issued to Chesapeake Operating, Inc., for violation of the Clean Air Act (42 U.S.C. § 7412(r)(1)). The violation was identified based on our May 5, 2011, and June 16, 2011, inspections of your Carmelite No. 1-19H well located near Bethany, Oklahoma County, Oklahoma. The general duty clause violation found consists of a release of an extremely hazardous substance; specifically, methane.

Effective upon receipt of this Order, you shall immediately fix, repair or replace the leaking component as noted in the enclosed Order, and comply with the provisions of this Order. The Environmental Protection Agency is committed to ensuring compliance with the requirements of the Clean Air Act, and my staff will assist you in any way possible.

If you have any questions, please contact Tony Robledo, of my staff, at 214-665-8182.

Sincerely,

John Blevins
Director
Compliance Assurance and
Enforcement Division

Enclosure

cc: Brad Flaming, ODEQ
Richard Groshong, ODEQ
David Craycraft
District Manager, Chesapeake Operating, Inc.

U.S. ENVIRONMENTAL PROTECTION AGENCY-REGION 6
ADMINISTRATIVE COMPLIANCE ORDER
In the Matter of Chesapeake Operating, Inc., Respondent
Docket No. CAA- 06-2011-3328

STATUTORY AUTHORITY

The following findings are made and Administrative Compliance Order (Order) issued under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA), by Section 113(a)(3) of the Clean Air Act (Act), 42 U.S.C. § 7413(a)(3). The Administrator has delegated the authority to issue this Order to the Regional Administrator of EPA Region 6 who has further delegated such authority to the Director of the Compliance Assurance and Enforcement Division.

FINDINGS

1. Respondent, Chesapeake Operating, Inc., is a "person" as defined by Section 302(e) of the Act, 42 U.S.C. § 7602(e).

2. At all times relevant to the violation alleged herein, Respondent operated the natural gas well, Carmelite No. 1-19H, located in Oklahoma County, Oklahoma (the "Facility").

3. The Facility is a "stationary source" as defined by Section 112(r)(2)(C) of the Act, 42 U.S.C. 7412(r)(2)(C).

4. On May 5, 2011, EPA contractors observed a release of pollutants from vents and hatches utilizing the FLIR® Gas Finder Infrared Camera. On June 15, 2011, EPA inspectors were unable to determine if the cause of the release had been fixed, repaired or replaced.

5. Based on observations using the FLIR® Gas Finder Infrared Camera, and the Gas Analysis provided by the Facility, the EPA inspectores determined that the release of pollutants described in paragraph four (4) contained methane.

6. Methane is highly flammable and/or explosive.

7. An extremely hazardous substance under Section 112(r) of the Act, 42. U.S.C. § 7412(r) includes, but is not limited to, methane. The releases as described in paragraph four (4) are from an unpermitted source.

8. Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1), requires owners and operators to design and maintain a safe facility, taking such steps as are necessary to prevent releases of extremely hazardous substances.

9. On May 5, 2011, Respondent released an emission containing methane into the ambient air from a stationary source in violation of Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1).

ORDER

Based on these findings and pursuant to the authority of Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), EPA orders that Respondent take the following actions upon receipt of this Order:

1. Fix, repair, or replace the leaking component that led to the unpermitted release of an extremely hazardous substance as described in paragraph four (4), upon receipt of this Order.

2. Within fifteen (15) days of the receipt of this Order, Respondent shall provide written certification to the EPA, Region 6, that the activities required in the previous paragraph have been completed and shall include any supporting documents such as receipts and invoices. The written certification and supporting documentation shall be addressed to Mr. David Garcia, U.S. EPA Region 6, Associate Director, Compliance Assurance and Enforcement Division, (Mail Code 6EN-A) 1445 Ross Ave., Dallas, TX 75202. Respondent shall sign and certify under penalty of law that the certification and supporting documentation are true, accurate, and not misleading.

GENERAL PROVISIONS

Issuance of this Order shall not be deemed an election by EPA to waive any administrative, judicial, civil or criminal action to seek penalties, fines or other relief under the Act for the violation alleged herein or other violations which may become known to EPA. EPA reserves the right to seek any remedy available under the law which it deems appropriate.

Failure to comply with this Order or the Act may result in the initiation of an administrative penalty action by EPA or a civil judicial penalty action by the U.S. Department of Justice.

Compliance with this Order does not relieve Respondent of the obligation to comply with all applicable federal, state and local laws.

JUL 15 2011
Date

John Blevins
Director
Compliance Assurance and
Enforcement Division

Chesapeake ENERGY

Regulatory Department

August 3, 2011

VIA CERTIFIED MAIL # 7010 1870 0001 4623 5247

Mr. David Garcia, Associate Director
U.S. EPA Region 6
Compliance Assurance and Enforcement Division, (Mail Code 6EN-A)
1445 Ross Avenue
Dallas, TX 75202

Re: Administrative Compliance Order Docket Number CAA-06-2011-3326
Mabel T 2-18H
Chesapeake Operating, Inc.

Dear Mr. Garcia:

Chesapeake Operating, Inc. ("COI") wishes to respond to the Findings and Order set forth in Administrative Compliance Order CAA-06-2011-3326 ("Order") dated July 15, 2011, which was issued by the Environmental Protection Agency ("EPA"), pursuant to the authority of Clean Air Act ("CAA") Section 113(a)(3), 42 U.S.C. §7413(a)(3). While COI appreciates the EPA's effort to inspect our operations to ensure compliance, COI respectfully disagrees with the following findings contained in the Order:

> 7. An extremely hazardous substance under Section 112(r) of the Act, 42 U.S.C. §7412(r)(1) includes but is not limited to, methane. The releases as described in paragraph 4 are from unpermitted sources.

Potential emissions of volatile organic compounds ("VOC") were calculated to be less than 100 tons per year ("TPY") and actual emissions were calculated to be less than 40 TPY; therefore this facility meets the definition of a Permit Exempt Facility found in Oklahoma Administrative Code ("OAC") 252:100-7-1.1. Since the facility is considered to be a permit exempt facility, the emissions described in paragraph 4 were authorized to be emitted at the facility without obtaining a permit. Additionally, methane is not subject to permitting requirements under the CAA or the OAC.

> 8. Section 112(r)(1) of the Act, 42 U.S.C. §7412(r)(1) requires owners and operators to design and maintain a safe facility, taking such steps as are necessary to prevent releases of extremely hazardous substances.

The General Duty Clause of Section 112(r) imposes three broad requirements:

1. Identify hazards which may result from the accidental release of certain substances;
2. Design and maintain a safe facility while taking steps as necessary to prevent the accidental release of those substances, and;
3. Minimize the consequences of any accidental release of those substances.

The purpose of the General Duty Clause is to prevent the accidental release of extremely hazardous substances. The term "accidental release" is defined in 42 U.S.C. §7412(r)(2)(A) as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source. Since the facility is designed and authorized to vent from the tank hatches, the release of vapors from a hatch is not accidental.

The operational design of the production tanks at this facility specifically anticipates venting through the tank thief hatches. The purpose of this operational design is to facilitate the rapid dispersion of gas/vapors, including methane, and to prevent the overpressure of the tank. The emissions from regulated pollutants through the thief hatches are accounted for when determining the permit status. The purpose of the dispersion of the gas and relief of pressure through the hatches is to ensure safe operation of the facility. The tank hatches are located on the top of the tanks to allow released gas/vapors to rapidly disperse at a safe elevation and prevent the unsafe accumulation of methane at or near ground level. Since methane is lighter that air, it will rapidly rise and safely be dispersed into the atmosphere as intended. The Findings in the Order demonstrate that the tank hatches were operating as designed and that COI has (1) identified a potential hazard – i.e., potential tank overpressure and release of gas/vapors, (2) designed the facility to relieve pressure and disperse gas/vapors to prevent unsafe conditions, and (3) done so in order to minimize the consequences of such situations including the accidental release of methane. The design allows the facility to operate safely by having controlled release of allowed emissions that disperse in accordance with the requirements of Section 112(r) of the CAA. Therefore, Chesapeake is complying with all three requirements found in the General Duty Clause.

In response to Items 1 and 2 of the Order, COI has replaced the tank hatch seals at the facility. The seals were replaced July 14, 2011. The receipts for the new tank seals are attached.

COI appreciates EPA's inspection of our facility. COI will continue to monitor and inspect our operations at the facility and will make any repairs or modifications as necessary to ensure safe operations as well as compliance with authorized emission limits.

If there are any further questions, please feel free to contact Levi Poe at (405) 935-7866.

Sincerely,

David Craycraft
District Manager, Southern Mid-Continent District – COI

Enclosure

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— OF —
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www.smithpipe.net

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INVOICE

Invoice No: 70560
Invoice Date: 07/13/2011
Customer ID #: 1110- 16035

ELECTRONIC

Ship Via: SMITH PIPE
Terms: 1.5%, NET 30
Attn to: ERIC EDWARDS
Lease Name: MABLE T 2-18H
Your PO #: N/A
Property #: 731721
AFE #: N/A
Salesman: JOE BOB KINNAMAN

Sold To

CHESAPEAKE ENERGY
PO BOX 548806
OKLAHOMA CITY, OK 73154

Ship To

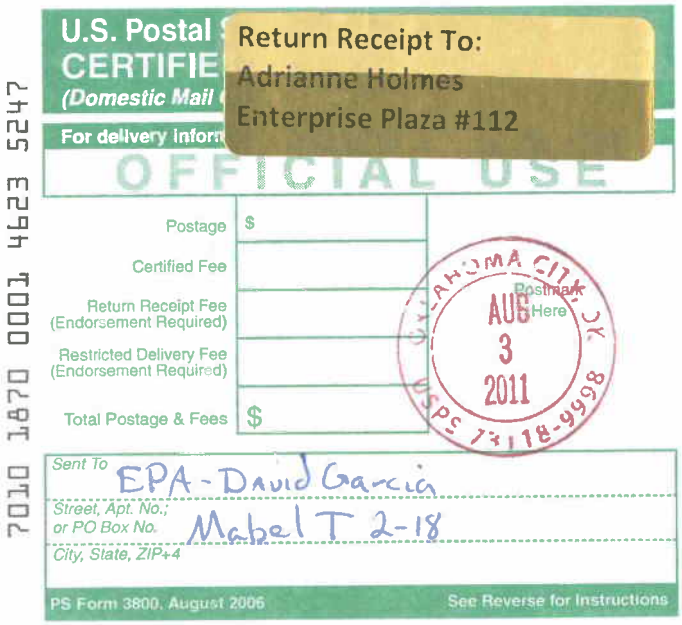
CHESAPEAKE ENERGY
PO BOX 548806
OKLAHOMA CITY, OK 73154

QTY	DESCRIPTION	PRICE	AMOUNT
4	ENARDO 660 THIEF HATCH WITH VITRON GASKETS	668.00	2,672.00
	DISOCUNT $40.08, IF PAID BY 08/13/11		

PLEASE PAY THIS AMOUNT: $ 2,672.00

ABILENE

All Invoices Due and Payable in Abilene, Taylor County, Texas. All Invoices Remaining Unpaid 30 Days From The Date of Invoices Are Subject to Late Charges of 1 1/2%, 18% Annual Rate, Along With Attorney and Collection Fees. Please Be Advised This Is A Used Product NOT Subject To Any Warranty Intended Or Implied - Sold As Is - Where Is. Title To This Pipe Or Equipment Does Not Pass Until Invoice Is Paid In Full. Equipment Subject To Repossession Without Notice



U.S. Postal
CERTIFIE
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For delivery inform

Return Receipt To:
Adrianne Holmes
Enterprise Plaza #112

OFFICIAL USE

Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $

OKLAHOMA CITY, OK
AUG 3 2011
Postmark Here
USPS 73118-9998

7010 1870 0001 4623 5247

Sent To EPA - David Garcia
Street, Apt. No.; or PO Box No. Mabel T 2-18
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. David Garcia, Associate Director
U.S. EPA Region 6
Compliance Assurance and Enforcement Division
Mail Code 6EN-A
1445 Ross Avenue
Dallas, TX 75202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) EPA REGION 6 C. Date of Delivery
AUG 05 2011

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7010 1870 0001 4623 5247

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Chesapeake ENERGY

Regulatory Department

August 3, 2011

VIA CERTIFIED MAIL # 7011 0470 0000 1120 9553

Mr. David Garcia, Associate Director
U.S. EPA Region 6
Compliance Assurance and Enforcement Division, (Mail Code 6EN-A)
1445 Ross Avenue
Dallas, TX 75202

Re: Administrative Compliance Order Docket Number CAA-06-2011-3328
Carmelite 1-19H
Chesapeake Operating, Inc.

Dear Mr. Garcia:

Chesapeake Operating, Inc. ("COI") wishes to respond to the Findings and Order set forth in Administrative Compliance Order CAA-06-2011-3328 ("Order") dated July 15, 2011, which was issued by the Environmental Protection Agency ("EPA"), pursuant to the authority of Clean Air Act ("CAA") Section 113(a)(3), 42 U.S.C. §7413(a)(3). While COI appreciates the EPA's effort to inspect our operations to ensure compliance, COI respectfully disagrees with the following findings contained in the Order:

> 7. An extremely hazardous substance under Section 112(r) of the Act, 42 U.S.C. §7412(r)(1) includes but is not limited to, methane. The releases as described in paragraph 4 are from unpermitted sources.

Potential emissions of volatile organic compounds ("VOC") were calculated to be less than 100 tons per year ("TPY") and actual emissions were calculated to be less than 40 TPY; therefore this facility meets the definition of a Permit Exempt Facility found in Oklahoma Administrative Code ("OAC") 252:100-7-1.1. Since the facility is considered to be a permit exempt facility, the emissions described in paragraph 4 were authorized to be emitted at the facility without obtaining a permit. Additionally, methane is not subject to permitting requirements under the CAA or the OAC.

> 8. Section 112(r)(1) of the Act, 42 U.S.C. §7412(r)(1) requires owners and operators to design and maintain a safe facility, taking such steps as are necessary to prevent releases of extremely hazardous substances.

The General Duty Clause of Section 112(r) imposes three broad requirements:

1. Identify hazards which may result from the accidental release of certain substances;
2. Design and maintain a safe facility while taking steps as necessary to prevent the accidental release of those substances, and;
3. Minimize the consequences of any accidental release of those substances.

The purpose of the General Duty Clause is to prevent the accidental release of extremely hazardous substances. The term "accidental release" is defined in 42 U.S.C. §7412(r)(2)(A) as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source. Since the facility is designed and authorized to vent from the tank hatches and vents, the release of vapors from a hatch or a vent is not accidental.

The operational design of the production tanks at this facility specifically anticipates venting through the tank thief hatches and vents. The purpose of this operational design is to facilitate the rapid dispersion of gas/vapors, including methane, and to prevent the overpressure of the tank. The emissions from regulated pollutants through the thief hatches and vents are accounted for when determining the permit status. The purpose of the dispersion of the gas and relief of pressure through the hatches and vents is to ensure safe operation of the facility. The tank hatches are located on the top of the tanks and the vents are elevated above ground level to allow released gas/vapors to rapidly disperse at a safe elevation and prevent the unsafe accumulation of methane at or near ground level. Since methane is lighter that air, it will rapidly rise and safely be dispersed into the atmosphere as intended. The Findings in the Order demonstrate that the tank hatches and vents were operating as designed and that COI has (1) identified a potential hazard – i.e., potential tank overpressure and release of gas/vapors, (2) designed the facility to relieve pressure and disperse gas/vapors to prevent unsafe conditions, and (3) done so in order to minimize the consequences of such situations including the accidental release of methane. The design allows the facility to operate safely by having controlled release of allowed emissions that disperse in accordance with the requirements of Section 112(r) of the CAA. Therefore, Chesapeake is complying with all three requirements found in the General Duty Clause.

In response to Items 1 and 2 of the Order, COI has replaced the tank hatch seals at the facility. The seals were replaced July 14, 2011. The receipts for the new tank seals are attached. Necessary venting from the tanks should now only be released from the vents.

COI appreciates EPA's inspection of our facility. COI will continue to monitor and inspect our operations at the facility and will make any repairs or modifications as necessary to ensure safe operations as well as compliance with authorized emission limits.

If there are any further questions, please feel free to contact Levi Poe at (405) 935-7866.

Sincerely,

David Craycraft
District Manager, Southern Mid-Continent District – COI

Enclosure

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- Well Plugging

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Invoice No: 70558
Invoice Date: 07/13/2011
Customer ID #: 1110- 16035

ELECTRONIC

Ship Via: SMITH PIPE
Terms: 1.5%, NET 30
Attn to: ERIC EDWARDS
Lease Name: CARMALITE 1-19H
Your PO #: N/A
Property #: 624624
AFE #: N/A
Salesman: JOE BOB KINNAMAN

Sold To

CHESAPEAKE ENERGY
PO BOX 548806
OKLAHOMA CITY, OK 73154

Ship To

CHESAPEAKE ENERGY
PO BOX 548806
OKLAHOMA CITY, OK 73154

QTY	DESCRIPTION	PRICE	AMOUNT
5	ENARDO 660 THIEF HATCH WITH VITRON GASKETS	668.00	3,340.00
	DISCOUNT $50.10 IF PAID BY 08/13/11		

PLEASE PAY THIS AMOUNT: $3,340.00

All Invoices Due and Payable in Abilene, Taylor County, Texas. All Invoices Remaining Unpaid 30 Days From The Date of Invoices Are Subject to Late Charges of 1 1/2%, 18% Annual Rate, Along With Attorney and Collection Fees. Please Be Advised This Is A Used Product NOT Subject To Any Warranty Intended Or Implied - Sold As Is - Where Is. Title To This Pipe Or Equipment Does Not Pass Until Invoice Is Paid In Full. Equipment Subject To Repossession Without Notice

U.S. Postal Service
CERTIFIED MAIL
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com
OFFICIAL USE

Return Receipt To:
Adrianne Holmes
Enterprise Plaza #112

7011 0470 0000 1120 9553

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

DALLAS TX
AUG 3 2011
Postmark Here
USPS 75118-9998

Sent To: EPA - David Garcia
Street, Apt. No.; or PO Box No.: Carmelite 1-19H
City, State, ZIP+4:

PS Form 3800, August 2006 See Reverse for Instructions

Carmelite 1-19H

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. David Garcia, Associate Director
U S EPA Region 6
Compliance Assurance and Enforcement Division
Mail Code 6EN-A
1445 Ross Avenue
Dallas, TX 75202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X EPA REGION 6 ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

AUG 05 2011

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☑ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7011 0470 0000 1120 9553

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Chesapeake ENERGY

Regulatory Department

November 7, 2011

VIA CERTIFIED MAIL # 7011 0110 0002 0279 3237

Dominique Duplechain
USEPA, Region 6
Surveillance Section
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Re: Response to EPA Full Compliance Evaluation conducted June 2, 2011
Ponder Compressor Station
Ponder Midstream Gas Services, L.L.C. (PMGS)

Dear Ms. Duplechain:

PMGS received an Air Inspection Report (Report) from the Environmental Protection Agency, Region 6 (EPA) on August 31, 2011, which contained a Partial Compliance Evaluation (PCE) at the Ponder Compressor Station (facility) dated June 2, 2011. The following areas of concern were identified on page 11 of the PCE report and are responded to below:

Area of Concern 1

"30 TAC 106.4(c) states that "The emissions from the facility shall comply with all rules and regulations of the commission and with the intent of the TCAA, including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility."

Emissions were observed coming from a plastic tube on MC1973 (Attachment B, Video 000) with the FLIR® Infrared Camera. According to Mr. Alder, the plastic tubing is attached to the compressor rod packing vent to direct gas down off of the compressor cylinder. The gas would normally discharge on top of the distance piece which is only a few inches in length. The tubing allows the gas to vent out of the distance piece and prevents pressure build up inside the compressor crankcase.

Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405-848-8000 • fax 405-879-7908

Mr. Alder submitted manufacturer's documentation to support the suggestion that the piston rod packing leaks to relieve pressure, however, the packing will leak at higher rates due to wear and tear which is mentioned in the information provided (Attachment H).

An in frame overhaul was performed on the engine on 10/2112010 (Attachment K)."

PMGS Response

The emissions observed from the rod packing vent of engine MC1973 are included in the equipment leak emission estimates represented in the facility's 30 TAC 106 permit application (Attachment 1). The rod packing on engine MC1973 is maintained in good condition and was operating properly during the PCE.

Area of Concern 2

"40 CFR 60.4244 requires that "owners and operators of stationary 81 ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section." 60.4244(d) through (f) requires that compliance with NOx, CO and VOC mass per unit output emission limitations be determined by converting the measured concentration to an emission rate in g/hp-hr using the specific equations outlined in NSPS JJJJ. According to the Emissions test report {Example Calculations} for MC2209 the NSPS JJJJ specific equations for NOx, CO and VOC were not used to determine emission rates (Attachment I)."

PMGS Response

Although 40 CFR 60.4244 provides Equation 1 to calculate g/hp-hr, a widely accepted equation utilizing methodology from EPA Reference Method 19 also provides g/hp-hr. The equation used in the referenced report incorporates parameters from Method 19 (i.e. brake specific fuel consumption (BSFC), the actual volume of combustion components per unit of heat content (F_d)) to calculate the emission rate of g/hp-hr (Attachment 2). A comparison of the results obtained from Equation 1 from NSPS Subpart JJJJ and the equation below is provided as Attachment 3.

3. Converting ppm to g/bhp-hr:

$$g/BHP-hr = \frac{Q \times F_d \times BSFC \times CF \times 453.6 \frac{g}{lb} \times 20.9}{1{,}000{,}000 \times (20.9 - O_{2meas})}$$

Units
Q: dscfh

F_d: dscf/MMBTU
BSFC: BTU/HP-hr
Conversion Factor (CF): no units

The performance test report also contained pollutant concentrations in ppm (Attachment 2). According to Table 1 to NSPS Subpart JJJJ (shown below), concentrations in units of ppm at 15% O_2 may be used to demonstrate compliance with the emission standards of NSPS Subpart JJJJ.

Table 1 to Subpart JJJJ of Part 60—NO_X, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	*Maximum engine power*	*Manufacture date*	*Emission standards[a]*					
			g/HP-hr			*ppmvd at 15% O_2*		
			NO_X	*CO*	*VOC[d]*	*NO_X*	*CO*	*VOC[d]*
Non-Emergency SI Natural Gas[b] and Non-Emergency SI Lean Burn LPG[b]	*100≤HP<500*	*7/1/2008*	*2.0*	*4.0*	*1.0*	*160*	*540*	*86*
		1/1/2011	*1.0*	*2.0*	*0.7*	*82*	*270*	*60*
Non-Emergency SI Lean Burn Natural Gas and LPG	*500≤HP<1,350*	*1/1/2008*	*2.0*	*4.0*	*1.0*	*160*	*540*	*86*
		7/1/2010	*1.0*	*2.0*	*0.7*	*82*	*270*	*60*
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	*HP≥500*	*7/1/2007*	*2.0*	*4.0*	*1.0*	*160*	*540*	*86*
	HP≥500	*7/1/2010*	*1.0*	*2.0*	*0.7*	*82*	*270*	*60*
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	*HP<500*	*7/1/2008*	*3.0*	*5.0*	*1.0*	*220*	*610*	*80*
		1/1/2011	*2.0*	*5.0*	*1.0*	*150*	*610*	*80*
	HP≥500	*7/1/2007*	*3.0*	*5.0*	*1.0*	*220*	*610*	*80*
		7/1/2010	*2.0*	*5.0*	*1.0*	*150*	*610*	*80*
Landfill/Digester Gas Lean Burn	*500≤HP<1,350*	*1/1/2008*	*3.0*	*5.0*	*1.0*	*220*	*610*	*80*
		7/1/2010	*2.0*	*5.0*	*1.0*	*150*	*610*	*80*

Emergency	*25<HP<130*	*1/1/2009*	*[c]10*	*387*	*N/A*	*N/A*	*N/A*	*N/A*
	HP≥130		*2.0*	*4.0*	*1.0*	*160*	*540*	*86*

[a]Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O2.

[b]Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 of this subpart.

[c]The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NOX + HC.

[d]For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

The NO_x and CO concentrations provided in the performance test were in units of ppm, but were not corrected to 15% O_2 as allowed by Table 1 to Subpart JJJJ. Since the measured O_2 during the performance test was 0.00, the corrected value would be lower than reported on the "Summary of Test Results" table in the performance test report. The equation provided below from the performance test is used to correct ppm concentrations to 15% O_2.

4. Correction of actual ppm concentrations to 15% O_2 (40CFR60, App. B, Performance Specification 2, Equation 2-2):

$$ppm_{corr} = ppm \times \left(\frac{20.9 - 15}{20.9 - O_{2meas}}\right)$$

The table below provides the concentrations of NOx and CO corrected to 15% O_2.

Pollutant	Reported Uncorrected Concentration (ppm)	Concentration Corrected to 15% O_2 (ppm)	NSPS Subpart JJJJ Emission Standard (ppm at 15% O_2)
NOx	9.17	2.59	160.0
CO	130.34	36.80	540.0

The VOC concentrations were reported as 0.00 ppm and were corrected to 15% O_2.

The test results for NOx, CO and VOC demonstrate compliance with the concentration limits found in Table 1 to NSPS Subpart JJJJ.

PMGS appreciates the opportunity to respond to the areas of concern identified in the PCE. If any further questions arise, please contact Jaron Hill at (405) 935-7869 or by email at jaron.hill@chk.com.

Sincerely,

Greg Floerke
Midstream Area Manager

Attachments:

1. Application for 30 TAC 106 Permit, dated February 26, 2010 (See pg.5 for "Site Fugitives"; flagged)
2. Performance Test Report Submission for MC2209, dated December 3, 2010
3. g/hp-hr Comparison

Attachment 1

Chesapeake ENERGY

Regulatory Department

February 26, 2010

VIA CERTIFIED MAIL # 7009 0960 0000 6543 9978

TCEQ
Air Permits Initial Review Team
MC161
P.O. Box 13087
Austin, TX 78711-3087

Re: Permit by Rule Modification Registration Application
Texas Midstream Gas Services, LLC, CN- 603104530
PBR Registration No. 82981
Ponder Compressor Station, RN-105354062
Denton County, Texas

Dear Sir or Madam:

Texas Midstream Gas Services, LLC (Texas Midstream) respectfully submits modifications to the referenced registration. The purpose of this application is to adjust operating parameters for one (1) IC engine driven compressor (and lower the NOx emissions factor) that must meet 30 TAC Chapter 117 NOx emission standards by March 1, 2010 at the reference facility.

A standby generator, shown on the original registration, is no longer needed and is being removed on this registration.

This submittal contains Form PI-7CERT and supporting backup. The results of the January 28, 2010, performance test will be submitted under a separate cover at a later date.

If you or your staff have any questions, please contact me at (405) 935-4882 or by email at brandi.johnson@chk.com.

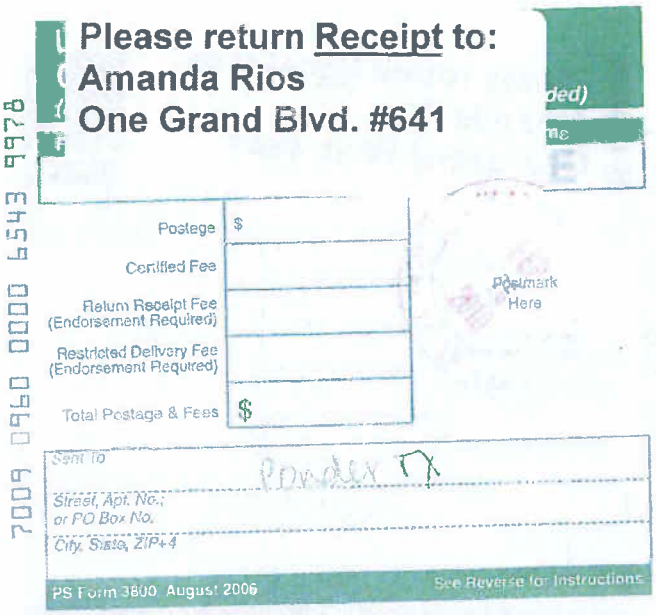
Chesapeake Energy Corporation
P.O. Box 18496 • Oklahoma City, OK 73154-0496 • 6100 N. Western Avenue • Oklahoma City, OK 73118
405.848.8000 • fax 405.935.7908

Sincerely,

Brandi Johnson
EHS Specialist
Chesapeake Energy

Enclosures

cc: Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, Texas 76118-6951
VIA CERTIFIED MAIL # 7009 0960 0000 6543 9985



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

TCEQ
Air Permits Initial Review Team
MC161
P.O. Box 13087
Austin, TX 78711-3087

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (*Printed Name*) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

TPASSCPA
MAR 0 1 2010

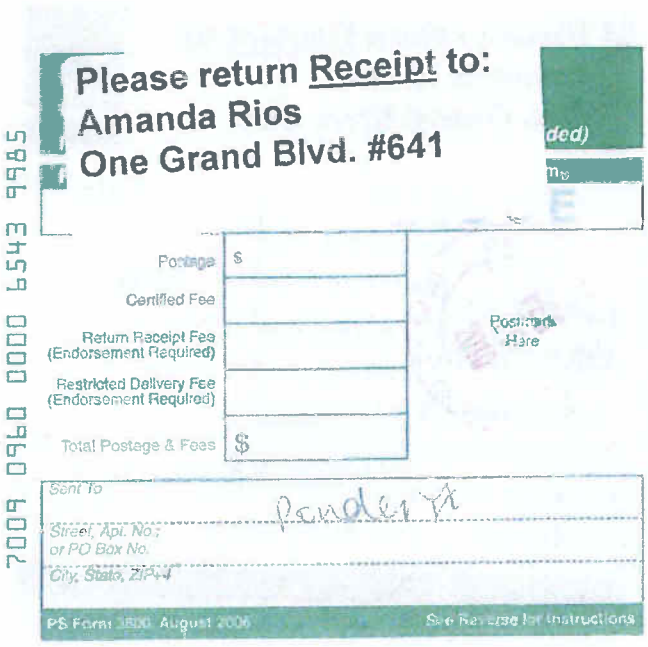
3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7009 0960 0000 6543 9978

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7009 0960 0000 6543 9985



Please return Receipt to:
Amanda Rios
One Grand Blvd. #641

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To Ponder TX

Street, Apt. No.; or PO Box No.

City, State, ZIP+4

PS Form 3800, August 2006 — See Reverse for Instructions

Ponder TX

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, Texas 76118-6951

COMPLETE THIS SECTION ON DELIVERY

A. Signature X Marilyn Stubits ☐ Agent ☐ Addressee

B. Received by (Printed Name) Marilyn Stubits

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes ☐ No
If YES, enter delivery address below:

2010

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

Article Number (Transfer from service label) 7009 0960 0000 6543 9985

Form 3811, February 2004 — Domestic Return Receipt — 102595-02-M-1540

NEW SOURCE REVIEW
PERMIT BY RULE REGISTRATION
STATE OF TEXAS
TEXAS MIDSTREAM GAS SERVICES, LLC
PONDER COMPRESSION FACILITY
DENTON COUNTY, TEXAS

Texas Commission on Environmental Quality
Air Permits Initial Review Team (APIRT)
P.O. Box 13087
MC-161
Austin, Texas 78711-3087
(512) 239-1000

Prepared For:
Ms. Brandi Johnson
EHS Specialist
Texas Midstream Gas Services, LLC
6100 N. Western Ave., P.O. Box 18162
Oklahoma City, OK 73154-0162
(405) 767-7908

Prepared by:
Flatrock Engineering and Environmental, Ltd.
9341 E. Lake Highlands Dr.
Dallas, Texas 75218
(214) 320-8804

February, 2010

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Form 10400 (Core Data)	III
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Area Map	VII
Compliance Checklists	VIII

SECTION I

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

I. REGISTRANT INFORMATION			
A. TCEQ Customer Reference Number:	CN-603104530	TCEQ Regulated Entity Number:	RN-105354062
Note: If "NO," CN or RN number was entered above; please fill out the required Core Data Form, which will be available in Step II of the submittal process.			
B. Company or Other Legal Customer Name: Texas Midstream Gas Services, LLC			
Company Official Contact Name: Brandi Johnson		Title: EHS Specialist	
Mailing Address: 6100 North Western Ave., P.O. Box 18496			
City: Oklahoma City		State: OK	Zip Code: 73154-0496
Phone No.: 405-935-4882	Fax No.: 405-849-4882	E-mail Address: brandi.johnson@chk.com	
C. Technical Contact Name: Mark Martelli		Title: Consultant	
Company: Flatrock Engineering & Environmental, Ltd			
Mailing Address: 9341 E. Lake Highlands Dr.			
City: Dallas		State: TX	Zip Code: 75218
Phone No.: 214-320-8804	Fax No.: 801-340-4696	E-mail Address: mark.martelli@flatrockenergy.net	
D. Facility Location Information - Street Address: 6501 B Donald Rd, Justin, TX 76247			
If "NO," street address, provide written driving directions to the site: (attach description if additional space is needed)			
From E. Eakin Cemetary Rd/Hwy 156 intersection, north of Justin, take E. Eakin Cemetary Rd west to Tim Donald Rd. Turn left and go 2/3 mi south to site on left.			
City: Ponder	County: Denton	Zip Code: 76247	
II. FACILITY AND SITE INFORMATION			
A. Name and Type of Facility: Ponder Compression Facility./ natural gas production/transportation		☒ Permanent ☐ Portable	
B. PBR claimed under **30 TAC § 106** *(List all)*:			
§ 106.352	§ 106.		
§ 106.512	§ 106.		
§ 106.	§ 106.		
Are you claiming a **historical standard exemption or PBR**?		☐ YES ☒ NO	
If "YES," enter effective date and Rule Number:			
C. Is there a previous Standard Exemption or PBR for the facility in this registration? (Attach details regarding changes.)		☒ YES ☐ NO	
If "YES," enter Registration Number and Rule Number:	*82981*	106.352, 106.512	

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

II. FACILITY AND SITE INFORMATION *(continued)*				
D. Are there any **other facilities** at this site which are **authorized by an Air Standard Exemption or PBR?**				☐ YES ☒ NO
If "YES," enter Registration Number and Rule Number:				
E. Are there any **other air preconstruction permits** at this site?				☐ YES ☒ NO
If "YES," enter Permit Numbers:				
Are there any other air preconstruction permits at this site that would be directly associated with this project?				☐ YES ☒ NO
If "YES," enter Permit Numbers:				
F. Is this facility located at a site which is required to obtain a federal operating permit pursuant to 30 TAC Chapter 122?				☐ YES ☒ NO ☐ To be determined
If the site currently has an existing federal operating permit, enter the permit number:				
Identify the requirements of 30 TAC Chapter 122 that will be triggered if this certification is accepted.				
☐ Initial Application for an FOP	☐ Significant Revision for an SOP	☐ Minor Revision for an SOP		
☐ Operational Flexibility/off Permit Notification for an SOP	☐ Revision for GOP	☐ To be Determined	☒ None	
Identify the type(s) issued and/or FOP application(s) submitted/pending for the site. *(Check all that apply)*				
☐ SOP	☐ GOP	☐ GOP application/revision application: Submitted or under APD review.		
☐ SOP application/revision application: submitted or under APD review.		☒ N/A		
G. TCEQ Account Identification Number *(if known)*:				
III. FEE INFORMATION				
See Section VI. for address to send fee or go to www.2.tceq.state.tx.us/epay to pay online.				
A. Is this certification to solely establish a federally enforceable emission limit and not authorize any new facilities? If "YES," than no fee is required. If "NO," then go to Section III.B.				☐ YES ☒ NO
B. *If "YES," to any of the following three questions, a **$100** fee is required. Otherwise, a **$450** fee is required.*				
Does this business have less than 100 employees?				☐ YES ☒ NO
Does this business have less than 6 million dollars in annual gross receipts?				☐ YES ☒ NO
Is this registration submitted by a governmental entity with a population of less than 10,000?				☐ YES ☒ NO
C. Check/Money Order or Transaction Number *(Payable to TCEQ)*:		*Was fee **Paid** online?*		☐ YES ☒ NO
Company name of check: Texas Midstream Gas Services LLC		Fee amount: Check #32504		**$450.00**

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

IV. SELECTED FACILITY REVIEWS ONLY—TECHNICAL INFORMATION		
Note: If claiming one of the following PBRs, complete this section, then skip to Section VI., "Submitting your registration" below:		
Animal Feeding Operations § 106.161, Livestock Auction Facilities § 106.162, Saw Mills § 106.223, Grain Handling, Storage and Drying § 106.283, Auto Body Refinishing Facilities §106.436, and Air Curtain Incinerator § 106.496		
A. Is the applicable PBR checklist attached which shows the facility meets all general and specific requirements of the PBR(s) being claimed? *(If submitting electronically, click "YES.")*		☐ YES ☐ NO
B. Distance from this facility's emission release point to the nearest property line:		feet
Distance from this facility's emission release point to the nearest off-property structure:		feet
V. TECHNICAL INFORMATION INCLUDING STATE AND FEDERAL REGULATORY REQUIREMENTS ***Registrants must be in compliance with all applicable state and federal regulations and standards to claim a PBR.***		
A. Is confidential information submitted and properly marked **"CONFIDENTIAL"** with this registration?		☐ YES ☒ NO
B. Is a process flow diagram or a process description attached?		☒ YES ☐ NO
C. Are emissions data and calculations for this claim attached?		☒ YES ☐ NO
D. Is information attached showing how the **general** requirements **(30 TAC § 106.4)** of the PBR is met for this Registration? **(PBR checklists** may be used, but are optional)		☒ YES ☐ NO
Note: Please be reminded that if the facilities listed in this registration are subject to the Mass Emissions Cap & Trade program under 30 TAC Chapter 101, Subchapter H, Division 3, the owner/operator of these facilities must possess NO_x allowances equivalent to the actual NO_x emissions from these facilities.		
E. Is information attached showing how the **specific PBR** requirements are met for this registration? ***(PBR checklist** may be used, but are optional)*		☒ YES ☐ NO
F. Distance from this facility's emission release point to the nearest property line:		40 feet
Distance from this facility's emission release point to the nearest off-property structure:		300 feet
Note: In limited cases, a map or drawing of the site and surrounding land use may be requested during the technical review or at the request of the TCEQ Regional Office or local air pollution control program during an investigation.		

Texas Commission on Environmental Quality
Form PI-7-CERT
Certification and Registration for Permits by Rule

VI. SIGNATURE FOR CERTIFICATION AND REGISTRATION

The signature below indicates that the Responsible Official has knowledge of the facts herein set forth and that the same are true, accurate, and complete to the best of my knowledge and belief. By this signature, the maximum emission rates listed on this certification reflect the maximum anticipated emissions due to the operation of this facility and all representations in this certification of emissions are conditions upon which the facilities and sources will operate. It is understood that it is unlawful to vary from these representations unless the certification is first revised. The signature certifies that to the best of the Responsible Official's knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption or permit by rule and the facility will operated in compliance with all regulations of the Texas Commission on Environmental Quality and with Federal U.S. Environmental Protection Agency regulations governing air pollution. The signature below certifies that, based on information and belief formed after reasonable inquiry, the statements and information above and contained in the attached document(s) are true, accurate, and complete. **If you questions on how to fill out this form or about air quality permits. Please call 512/239-1250.** *Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512/239-3282.*

SIGNATURE:_____ _____

(ORIGINAL SIGNATURE REQUIRED) DATE:

VII. SUBMITTING COPIES OF THE CERTIFICATION AND REGISTRATION

Copies must be sent as listed below:
Processing delays may occur if copies are not sent as noted.

Who	*Where*	*What*
Air Permits Initial Review Team (APIRT)	Regular, Certified, Priority Mail MC161, P.O. Box 13087 Austin, Texas 78711-3087 Hand Delivery, Overnight Mail MC 161, 12100 Park 35 Circle, Building C, Third Floor Austin, Texas 78753 Fax No.: (512) 239-2123 *(do not follow fax with paper copies)*	Originals Form PI-7, Core Data Form. and all attachments
Revenue Section, TCEQ	Regular, Certified, Priority Mail MC 214, P.O. Box 13088 Austin, Texas 78711-3088 Hand Delivery, Overnight Mail MC 214, 12100 Park 35 Circle, Building A, Third Floor Austin, Texas 78753	Original Money Order or Check Copy of Form PI-7 and Core Data Form
Appropriate TCEQ Regional Office	To find your Regional Office address, go to the TCEQ Web site at www.tceq.state.tx.us, or call (512) 239-1250.	Copy of Form PI-7, Core Data Form, and all attachments.
Appropriate Local Air Pollution Control Program(s)	To Find your local or Regional Air Pollution Control Programs go to the TCEQ, APD Website at www.tceq.state.tx.us/nav/permits/air_permits.html or call (512) 239-1250	Copy of Form PI-7, Core Data Form, and all attachments.

SECTION II

Texas Midstream Gas Services, LLC

335913 TX COMMISSION OF ENVIROMENTAL No. 32504

VOUCHER NUMBER	INVOICE DATE	INVOICE NUMBER	DESCRIPTION OR GROSS AMOUNT DISCOUNT	NET AMOUNT
777053	2/17/10	021710D	PONDER COMPRSR FACILITY PBR M	450.00
			Total for check	*$450.00*

TEXAS MIDSTREAM GAS SERVICES, LLC
P.O. Box 18162, Oklahoma City, OK 73154-0162
(405) 935-4433

Date FEBRUARY 18, 2010

56-382
412

0000032504
9600109249

■ FOUR HUNDRED FIFTY AND 00 /100 Dollars **********

Wells Fargo Bank, N.A., 115 Hospital Drive, Van Wert, OH 45891

$450.00

VOID AFTER 90 DAYS
NO THIRD PARTY ENDORSEMENTS

Vendor No. 335913

Pay to The Order Of TX COMMISSION OF ENVIROMENTAL
QUALITY
PO BOX 13088
AUSTIN TX 78711 3088

Jennifer M Conigsby

⑈0000032504⑈ ⑆041203824⑆ 9600109249⑈

SECTION III

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	6501 B Donald Rd							
	City	Justin	State	TX	ZIP	76247	ZIP + 4	
25. Mailing Address:	6100 North Western Avenue, P.O. Box 18162							
	City	Oklahoma City	State	OK	ZIP	73154	ZIP + 4	162

26. E-Mail Address:		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(405) 848-8000		( ) -

30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
1311		211111	

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

Natural Gas Production

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	From E. Eakin Cemetary Rd/Hwy 156 intersection, north of Justin, take E. Eakin Cemetary Rd west to Tim Donald Rd. Turn left and go 2/3 mi south to site on left.

36. Nearest City	County	State	Nearest ZIP Code
Ponder	Denton	TX	76247

37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
33	7	37	97	17	49

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Industrial Hazardous Waste	☐ Municipal Solid Waste
☒ New Source Review – Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS	☐ Sludge
☐ Stormwater	☐ Title V – Air	☐ Tires	☐ Used Oil	☐ Utilities
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Mark Martelli	41. Title:	Consultant

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(214) 320-8804		(801) 340-4696	mark.martelli@flatrockenergy.net

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Texas Midstream Gas Services, LLC	Job Title:	COO - Chesapeake Midstream Partners
Name *(In Print)*:	Bob Purgason	Phone:	(405) 935-2757
Signature:		Date:	2/26/10

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided)

☐ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application)

☐ Renewal (Core Data Form should be submitted with the renewal form) ☒ Other **Modification to PBR registration**

2. Attachments — Describe Any Attachments: (ex. Title V Application, Waste Transporter Application, etc.)

☒ Yes ☐ No — Permit by Rule Registration Application

3. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number (if issued)
CN 603104530		RN 105354062

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)

6. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check only one of the following:

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☒ No Change**

**If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:	☐ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☒ Other: Limited Liability Company

9. Customer Legal Name (if an individual, print last name first: ex: Doe, John)	If new Customer, enter previous Customer below	End Date:
Texas Midstream Gas Services, LLC		

10. Mailing Address:							
	6100 North Western Avenue., P.O. Box 18162						
City	Oklahoma City	State	OK	ZIP	73154	ZIP + 4	0162

11. Country Mailing Information (if outside USA)	12. E-Mail Address (if applicable)

13. Telephone Number	14. Extension or Code	15. Fax Number (if applicable)
(405) 848-8000		( ) -

16. Federal Tax ID (9 digits)	17. TX State Franchise Tax ID (11 digits)	18. DUNS Number (if applicable)	19. TX SOS Filing Number (if applicable)
205093006			

20. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☐ Yes ☒ No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☒ No Change** (See below)

**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

23. Regulated Entity Name (name of the site where the regulated action is taking place)

Ponder Compression Facility

SECTION IV

FORM PI-7
V. B. PROCESS DESCRIPTION

Process Description:

The proposed registration for permit by rule is to adjust the operating parameters for one (1) IC engine driven compressor at a natural gas compressor station in Denton County. The operating parameters are being adjusted on one (1) 1340 hp Caterpillar G3516 LE IC reciprocating compressor engine driven inlet compressor to lower NOx emissions to comply with 30 TAC §117.2110 (a)(1)(B)(i) Emission Specification for Eight-Hour Attainment Demonstration for this DFW Eight-Hour Non-Attainment Area Chapter 117 minor site. The site should meet the requirements of 106.352.

The station is used to boost the pressure of sweet natural gas to a natural gas transportation system. Sweet natural gas from the inlet separator is compressed by two (2) 1380 hp Waukesha L5794 GSI rich burn IC reciprocating engine drive compressors MC1973 (formerly called C1), MC2209 (formerly called C2), and one (1) 1775 hp Caterpillar G3516 LE lean burn IC reciprocating engine driven compressor MC1989 (formerly called C3). Compressor discharge exits the station.

Engines

The Waukesha engines (MC1973 and MC2209) being greater than 500 HP qualified previously for permit by rule by following the requirements of 30 TAC 106.512 (1) by submitting Form PI-7 and Table 29 and 106.512 (2) (A) (i) for any spark-ignited, gas-fired rich burn engines thus limiting NO_x emissions to 2 g/hp-hr. MC1973 and MC2209 are installed with 3-way non-selective catalytic reduction (NSCR) catalytic converters and air/fuel ratio controllers.

The Caterpillar engine (MC1989) being greater than 500 HP qualifies for permit by rule by following the requirements of 30 TAC 106.512 (1) by submitting Form PI-7 and Table 29 and 106.512 (2) (A) (ii) for any spark-ignited, gas-fired lean-burn engine thus limiting NO_x emission to 2 g/hp-hr. MC1989 is equipped with and oxidative catalysts to reduce CO, VOC, and formaldehyde emissions.

Stack test results, performed following operating parameter adjustment, are attached with Table 29 in Section VI for MC1989.

To satisfy 106.512 (5) requirements, no gas fuel used at the site contains more than ten grains total sulfur per 100 dry standard cubic feet. A fuel gas analysis follows.

Compliance with 30 TAC § 106.512 (6) (A) is demonstrated utilizing EPA's SCREEN 3 model for the IC engine. Results follow and are tabulated below.

Screen 3 Results

Engine	Max Annual Concentration UG/M^3	NO2/NOx Ratio	NO2 Concentration
Waukesha L5794 GSI (MC1973)	1.3976	0.85	1.188

Waukesha L5794 GSI (MC2209)	1.3976	0.85	1.188
Caterpillar G3516 LE (MC1989)	1.3016	0.4	0.413

Denton County Annual Background Concentration 25.0

Screen 3 + Background Concentration 27.8

This is well below the 100 UG/M^3 NAAQS standard for NO_2.

Other Emission Sources

The standby generator (G1), shown on the original registration, is no longer needed and is being removed on this registration

Additionally, there is one (1) 100 barrel slop tank which has negligible emissions.

Fugitive emissions (FUG) were estimated using Oil and Gas Production factors from API.

Compressor blowdown (FUG1) which includes routine maintenance, start-up and shutdown of facilities, and temporary maintenance VOC emissions have also been added to this registration.

2440 Chambers Street, Suite A
Venus, TX 76084
817-539-2168 (O)
817-539-2170 (F)

CERTIFICATE OF ANALYSIS

Number : 2009110054-001A

Chesapeake Energy Marketing, Inc.
Terry Harris
5601 East 1st Street

Fort Worth, Texas 76103

Field:	Tarrant	**Report Date:**	11/13/09
Station:	Ponder Pre Coal. Filter	**Sample Of:**	Spot - Natural Gas
Location:	None	**Sample Date:**	11/10/2009
Sample Point:		**Sample Conditions:**	663 psi ,97° F
Cylinder # :	7514	**PO / Ref. No.:**	

Comments:
h2s 1 ppm

Analytical Data

Components	Mol %	Wt%	GPM at 14.73 psia	Method	Lab Tech.	Date Analyzed
				GPA-2286		11/11/09
N2	0.9720	1.5636		(MC10)		
CO2	2.6260	6.6365				
METHANE	93.2740	85.9231				
ETHANE	2.7310	4.7156	0.7299			
PROPANE	0.2800	0.7092	0.0771			
I-BUTANE	0.0390	0.1304	0.0128			
N-BUTANE	0.0400	0.1332	0.0126			
I-PENTANE	0.0120	0.0500	0.0044			
N-PENTANE	0.0080	0.0333	0.0029			
I-HEXANES	0.0021	0.0101	0.0008			
N-HEXANE	0.0030	0.0140	0.0012			
BENZENE	0.0008	0.0037	0.0002			
CYCLOHEXANE	0.0011	0.0052	0.0004			
I-HEPTANES	0.0028	0.0154	0.0012			
N-HEPTANE	0.0011	0.0062	0.0005			
TOLUENE	0.0009	0.0047	0.0003			
I-OCTANES	0.0016	0.0098	0.0008			
N-OCTANE	0.0004	0.0028	0.0002			
*E-BENZENE	0.0001	0.0003	0.0000			
*m,o,&p-XYLENE	0.0006	0.0033	0.0002			
I-NONANES	0.0010	0.0073	0.0005			
N-NONANE	0.0001	0.0010	0.0001			
I-DECANES	0.0004	0.0030	0.0002			
N-DECANE	0.0001	0.0008	0.0001			
I-UNDECANES +	0.0019	0.0175	0.0013			
TOTALS	100.0000	100.0000	0.8477			

Daniel D. Dunn

02/18/10

14:49:44
*** SCREEN3 MODEL RUN ***
*** VERSION DATED 95250 ***

Ponder CF Caterpillar G3516 LE

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	.260820
STACK HEIGHT (M)	=	6.0740
STK INSIDE DIAM (M)	=	.3048
STK EXIT VELOCITY (M/S)	=	49.7000
STK GAS EXIT TEMP (K)	=	730.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	16.27	143.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

BUOY. FLUX = 6.777 M**4/S**3; MOM. FLUX = 23.028 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH

10.	.0000	1	1.0	1.0	320.0	96.06	6.07	5.29
NO								
100.	12.46	3	10.0	10.0	3200.0	15.07	12.60	7.67
NO								
200.	15.46	4	15.0	15.0	4800.0	12.07	15.66	8.67
NO								
300.	14.03	4	10.0	10.0	3200.0	15.07	22.76	12.36
NO								
400.	12.12	4	8.0	8.0	2560.0	17.32	29.63	15.60
NO								
500.	10.73	4	5.0	5.0	1600.0	24.07	36.51	19.01
NO								
600.	9.636	4	4.5	4.5	1440.0	26.07	43.10	21.97
NO								
700.	8.697	4	4.0	4.0	1280.0	28.57	49.61	24.88
NO								
800.	7.915	4	3.5	3.5	1120.0	31.78	56.06	27.77
NO								
900.	7.248	4	3.5	3.5	1120.0	31.78	62.32	30.37
NO								
1000.	6.729	4	3.0	3.0	960.0	36.07	68.66	33.22
NO								
1100.	6.217	4	3.0	3.0	960.0	36.07	74.80	35.18
NO								
1200.	5.821	4	2.5	2.5	800.0	42.07	81.09	37.53
NO								
1300.	5.470	4	2.5	2.5	800.0	42.07	87.13	39.37
NO								
1400.	5.139	4	2.5	2.5	800.0	42.07	93.12	41.16
NO								
1500.	5.264	5	1.0	1.0	10000.0	62.32	75.43	32.22
NO								
1600.	5.397	5	1.0	1.0	10000.0	62.32	79.78	33.24
NO								
1700.	5.498	5	1.0	1.0	10000.0	62.32	84.12	34.23
NO								
1800.	5.569	5	1.0	1.0	10000.0	62.32	88.45	35.22
NO								
1900.	5.622	6	1.0	1.0	10000.0	52.75	62.22	24.82
NO								
2000.	5.822	6	1.0	1.0	10000.0	52.75	65.06	25.41
NO								
2100.	5.940	6	1.0	1.0	10000.0	52.75	67.88	25.91
NO								
2200.	6.042	6	1.0	1.0	10000.0	52.75	70.69	26.40
NO								
2300.	6.128	6	1.0	1.0	10000.0	52.75	73.50	26.88
NO								
2400.	6.200	6	1.0	1.0	10000.0	52.75	76.29	27.36
NO								
2500.	6.258	6	1.0	1.0	10000.0	52.75	79.08	27.83
NO								

2600.	6.305	6	1.0	1.0	10000.0	52.75	81.86	28.29
NO								
2700.	6.340	6	1.0	1.0	10000.0	52.75	84.63	28.75
NO								
2800.	6.366	6	1.0	1.0	10000.0	52.75	87.39	29.20
NO								
2900.	6.383	6	1.0	1.0	10000.0	52.75	90.14	29.65
NO								
3000.	6.391	6	1.0	1.0	10000.0	52.75	92.89	30.09
NO								
3500.	6.229	6	1.0	1.0	10000.0	52.75	106.49	31.90
NO								
4000.	6.008	6	1.0	1.0	10000.0	52.75	119.91	33.60
NO								
4500.	5.762	6	1.0	1.0	10000.0	52.75	133.17	35.20
NO								
5000.	5.507	6	1.0	1.0	10000.0	52.75	146.28	36.71
NO								
5500.	5.256	6	1.0	1.0	10000.0	52.75	159.25	38.16
NO								
6000.	5.012	6	1.0	1.0	10000.0	52.75	172.10	39.55
NO								
6500.	4.780	6	1.0	1.0	10000.0	52.75	184.82	40.88
NO								
7000.	4.560	6	1.0	1.0	10000.0	52.75	197.44	42.17
NO								
7500.	4.347	6	1.0	1.0	10000.0	52.75	209.96	43.27
NO								
8000.	4.149	6	1.0	1.0	10000.0	52.75	222.39	44.33
NO								
8500.	3.966	6	1.0	1.0	10000.0	52.75	234.72	45.36
NO								
9000.	3.796	6	1.0	1.0	10000.0	52.75	246.97	46.36
NO								
9500.	3.638	6	1.0	1.0	10000.0	52.75	259.14	47.32
NO								
10000.	3.490	6	1.0	1.0	10000.0	52.75	271.23	48.26
NO								
15000.	2.445	6	1.0	1.0	10000.0	52.75	388.66	56.48
NO								
20000.	1.863	6	1.0	1.0	10000.0	52.75	501.13	61.75
NO								
25000.	1.497	6	1.0	1.0	10000.0	52.75	609.90	66.21
NO								
30000.	1.247	6	1.0	1.0	10000.0	52.75	715.71	70.12
NO								
40000.	.9350	6	1.0	1.0	10000.0	52.75	920.32	75.67
NO								
50000.	.7456	6	1.0	1.0	10000.0	52.75	1117.50	80.31
NO								

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:

143.	16.27	3	10.0	10.0	3200.0	15.07	17.61	10.66
NO								

```
  DIST     = DISTANCE FROM THE SOURCE
  CONC     = MAXIMUM GROUND LEVEL CONCENTRATION
  STAB     = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)
  U10M     = WIND SPEED AT THE 10-M LEVEL
  USTK     = WIND SPEED AT STACK HEIGHT
  MIX HT   = MIXING HEIGHT
  PLUME HT= PLUME CENTERLINE HEIGHT
  SIGMA Y = LATERAL DISPERSION PARAMETER
  SIGMA Z = VERTICAL DISPERSION PARAMETER
  DWASH    = BUILDING DOWNWASH:
             DWASH=    MEANS NO CALC MADE (CONC = 0.0)
             DWASH=NO  MEANS NO BUILDING DOWNWASH USED
             DWASH=HS  MEANS HUBER-SNYDER DOWNWASH USED
             DWASH=SS  MEANS SCHULMAN-SCIRE DOWNWASH USED
             DWASH=NA  MEANS DOWNWASH NOT APPLICABLE, X<3*LB

**************************************
*** USER SPECIFIED AVERAGING TIMES ***
**************************************

ESTIMATED MAXIMUM CONCENTRATION FOR ANNUAL AVERAGING TIME:
1.3016 (+/- 0.3254) UG/M**3


**********************************
*** END OF SCREEN MODEL OUTPUT ***
**********************************
```

08/30/07
14:24:45

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 95250 ***

Ponder CS - 5794GSI (C1, C2)

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	.186480
STACK HEIGHT (M)	=	6.7058
STK INSIDE DIAM (M)	=	.3556
STK EXIT VELOCITY (M/S)	=	30.0600
STK GAS EXIT TEMP (K)	=	886.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	URBAN
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	17.47	53.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

****

BUOY. FLUX = 6.237 M**4/S**3; MOM. FLUX = 9.447 M**4/S**2.

*** FULL METEOROLOGY ***

****

*** SCREEN AUTOMATED DISTANCES ***

****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
15.	.2723E-02	3	10.0	10.0	3200.0	15.16	3.35	3.06	NO
100.	15.60	4	8.0	8.0	2560.0	17.28	15.85	13.98	NO
200.	10.46	4	3.5	3.5	1120.0	30.86	31.56	28.06	NO
300.	7.659	4	2.5	2.5	800.0	40.53	46.37	41.37	NO
400.	9.082	6	1.0	1.0	10000.0	52.11	42.86	28.43	NO
500.	9.927	6	1.0	1.0	10000.0	52.11	51.86	32.90	NO
600.	9.850	6	1.0	1.0	10000.0	52.11	60.67	37.16	NO
700.	9.347	6	1.0	1.0	10000.0	52.11	69.28	41.21	NO
800.	8.689	6	1.0	1.0	10000.0	52.11	77.68	45.06	NO
900.	8.008	6	1.0	1.0	10000.0	52.11	85.88	48.73	NO
1000.	7.361	6	1.0	1.0	10000.0	52.11	93.87	52.23	NO
1100.	6.769	6	1.0	1.0	10000.0	52.11	101.66	55.59	NO
1200.	6.238	6	1.0	1.0	10000.0	52.11	109.28	58.82	NO
1300.	5.764	6	1.0	1.0	10000.0	52.11	116.71	61.92	NO
1400.	5.344	6	1.0	1.0	10000.0	52.11	123.98	64.92	NO
1500.	4.970	6	1.0	1.0	10000.0	52.11	131.09	67.82	NO
1600.	4.638	6	1.0	1.0	10000.0	52.11	138.04	70.62	NO
1700.	4.341	6	1.0	1.0	10000.0	52.11	144.86	73.34	NO

1800.	4.075	6	1.0	1.0	10000.0	52.11	151.53	75.98	NO
1900.	3.837	6	1.0	1.0	10000.0	52.11	158.07	78.54	NO
2000.	3.621	6	1.0	1.0	10000.0	52.11	164.49	81.04	NO
2100.	3.426	6	1.0	1.0	10000.0	52.11	170.79	83.48	NO
2200.	3.249	6	1.0	1.0	10000.0	52.11	176.97	85.86	NO
2300.	3.088	6	1.0	1.0	10000.0	52.11	183.05	88.18	NO
2400.	2.941	6	1.0	1.0	10000.0	52.11	189.02	90.46	NO
2500.	2.806	6	1.0	1.0	10000.0	52.11	194.89	92.68	NO
2600.	2.682	6	1.0	1.0	10000.0	52.11	200.66	94.86	NO
2700.	2.567	6	1.0	1.0	10000.0	52.11	206.34	96.99	NO
2800.	2.462	6	1.0	1.0	10000.0	52.11	211.93	99.08	NO
2900.	2.364	6	1.0	1.0	10000.0	52.11	217.44	101.14	NO
3000.	2.273	6	1.0	1.0	10000.0	52.11	222.86	103.16	NO
3500.	1.901	6	1.0	1.0	10000.0	52.11	248.85	112.75	NO
4000.	1.630	6	1.0	1.0	10000.0	52.11	273.18	121.64	NO
4500.	1.423	6	1.0	1.0	10000.0	52.11	296.10	129.96	NO
5000.	1.262	6	1.0	1.0	10000.0	52.11	317.81	137.81	NO
5500.	1.132	6	1.0	1.0	10000.0	52.11	338.45	145.25	NO
6000.	1.026	6	1.0	1.0	10000.0	52.11	358.17	152.34	NO
6500.	.9376	6	1.0	1.0	10000.0	52.11	377.06	159.13	NO
7000.	.8630	6	1.0	1.0	10000.0	52.11	395.21	165.64	NO
7500.	.7990	6	1.0	1.0	10000.0	52.11	412.70	171.92	NO
8000.	.7438	6	1.0	1.0	10000.0	52.11	429.59	177.98	NO
8500.	.6955	6	1.0	1.0	10000.0	52.11	445.93	183.84	NO
9000.	.6531	6	1.0	1.0	10000.0	52.11	461.77	189.53	NO
9500.	.6154	6	1.0	1.0	10000.0	52.11	477.15	195.05	NO
10000.	.5818	6	1.0	1.0	10000.0	52.11	492.11	200.42	NO
15000.	.3755	6	1.0	1.0	10000.0	52.11	623.78	247.88	NO
20000.	.2768	6	1.0	1.0	10000.0	52.11	733.45	287.66	NO
25000.	.2190	6	1.0	1.0	10000.0	52.11	829.26	322.59	NO
30000.	.1812	6	1.0	1.0	10000.0	52.11	915.35	354.10	NO
40000.	.1498	4	1.0	1.0	320.0	91.26	1552.42	1553.35	NO
50000.	.1332	4	1.0	1.0	320.0	91.26	1745.91	1750.17	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 15. M:

53.	17.47	3	10.0	10.0	3200.0	15.16	11.82	10.87	NO

DIST = DISTANCE FROM THE SOURCE

CONC = MAXIMUM GROUND LEVEL CONCENTRATION

STAB = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)

U10M = WIND SPEED AT THE 10-M LEVEL

USTK = WIND SPEED AT STACK HEIGHT

MIX HT = MIXING HEIGHT

PLUME HT= PLUME CENTERLINE HEIGHT

SIGMA Y = LATERAL DISPERSION PARAMETER

SIGMA Z = VERTICAL DISPERSION PARAMETER

DWASH = BUILDING DOWNWASH:

DWASH= MEANS NO CALC MADE (CONC = 0.0)

DWASH=NO MEANS NO BUILDING DOWNWASH USED

DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED

DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED

DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** USER SPECIFIED AVERAGING TIMES ***
****

ESTIMATED MAXIMUM CONCENTRATION FOR ANNUAL AVERAGING TIME:
1.3976 (+/- 0.3494) UG/M**3

****
*** END OF SCREEN MODEL OUTPUT ***
****

SECTION V

PERMIT NO. 82981_ PERMIT TYPE: CONSTRUCTION [] AMENDMENT [X] ALTERATION [] RENEWAL [ ]

ACCOUNT ID NO.

TABLE 1(a)
EMISSION SOURCES

DATE _2-18-10

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA					EMISSION POINT DISCHARGE PARAMETERS											
EMISSION POINT [1]		COMPONENT OR AIR CONTAMINANT NAME (2)	AIR CONTAMINANT EMISSION RATE		UTM COORDINATES OF EMISSION PT. [5]			SOURCE								
								HEIGHT ABOVE GROUND [ft.]	HEIGHT ABOVE STRUCT. [ft.] [6(A)]	STACK EXIT DATA			FUGITIVES			
NUMBER	NAME		#/HR [3]	TONS/ YR [4]	ZONE	EAST [meters]	NORTH [meters]			DIA. [ft.] [6(B)]	VEL. [fps] [6(C)]	TEMP. [°F] [6(D)]	LENGTH [ft.] [7(A)]	WIDTH [ft.] [7(B)]	AXIS DEG. [7(C)]	E/W OF NORTH [7(D)]
EPN MC1973	WAUKESHA 5794	NOx	1.48	6.48	14	658,870	3,666,640	22		1.17	98.6	1135				
FIN		CO	2.65	11.59												
		VOC	0.33	1.44												
		PM	0.2	0.88												
		SO2	0.01	0.03												
EPN MC2209	WAUKESHA 5794	NOx	1.48	6.48	14	658,870	3,666,640	22		1.17	98.6	1135				
FIN		CO	2.65	11.59												
		VOC	0.33	1.44												
		PM	0.2	0.88												
		SO2	0.01	0.03												
EPN MC1989	CATERPILLAR G3516 LE	NOx	2.07	9.06	14	658,870	3,666,640	20		1.0	163	855				
FIN		CO	1.65	7.25												
		VOC	0.46	2.01												
		PM	0.1	0.44												
		SO2	0.01	0.03												

EPN = EMISSION POINT NUMBER
FIN = FACILITY IDENTIFICATION NUMBER

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL _____670_____ feet.
TNRCC STANDARD CONDITIONS ARE 68°F AND 14.7 PSIA [GENERAL RULE 101.1].

See instructions on reverse side.

TABLE 1(a)

PAGE __2__ OF _2___
EMISSION SOURCES

DATE _ DATE _2-18-10_

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this Table.

AIR CONTAMINANT DATA					EMISSION POINT DISCHARGE PARAMETERS											
EMISSION POINT [1]		COMPONENT OR AIR CONTAMINANT NAME (2)	AIR CONTAMINANT EMISSION RATE		UTM COORDINATES OF EMISSION PT. [5]			SOURCE					FUGITIVES			
NUMBER	NAME		#/HR [3]	TONS/ YR [4]	ZONE	EAST [meters]	NORTH [meters]	HEIGHT ABOVE GROUND [ft.]	HEIGHT ABOVE STRUCT. [ft.] [6(A)]	STACK EXIT DATA DIA. [ft.] [6(B)]	VEL. [fps] [6(C)]	TEMP. [°F] [6(D)]	LENGTH [ft.] [7(A)]	WIDTH [ft.] [7(B)]	AXIS DEG. [7(C)]	E/W OF NORTH [7(D)]
EPN FUG	SITE FUGITIVES	VOC	0.05	0.22												
FIN																
EPN FUG1	COMPRESSOR BLOWDOWNS	VOC	2.1	0.5												
EPN																
FIN																
EPN																
FIN																
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EPN = EMISSION POINT NUMBER
FIN = FACILITY IDENTIFICATION NUMBER

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL _____670_____ feet.
TNRCC STANDARD CONDITIONS ARE 68°F AND 14.7 PSIA [GENERAL RULE 101.1].

See instructions on reverse side.

CRITERIA EMISSIONS SUMMARY

Owner/Operator: Texas Midstream Gas Services, LLC
Facility: Ponder Compressor Station

Facility Name	Old Facility ID (EPN)	New Facility ID (EPN)	NOx PTE		CO (tpy)		VOC (tpy)		PM (tpy)		SO2 (tpy)	
			Tons/Yr	lbs/hr	Tons/Yr	lbs/hr	Tons/yr	lbs/hr	Tons/yr	lbs/hr	Tons/Yr	lbs/hr
Compressor 1 (5794)	C1	MC1973	6.48	1.48	11.59	2.65	1.44	0.33	0.88	0.20	0.03	0.01
Compressor 2 (5794)	C2	MC2209	6.48	1.48	11.59	2.65	1.44	0.33	0.88	0.20	0.03	0.01
Compressor 3 (3516)	C3	MC1989	9.06	2.07	7.25	1.65	2.01	0.46	0.44	0.10	0.03	0.01
Site Fugitives	FUG		NA	NA	NA	NA	0.22	0.05	NA	NA	NA	NA
Compressor Blowdowns[1]	FUG1		NA	NA	NA	NA	0.50	2.10	NA	NA	NA	NA
			22.02	5.03	30.43	6.95	5.61	3.27	2.20	0.50	0.10	0.02

[1] Compressor Blowdown Calculation: 2.1 lbs VOC/blowdown x 60 blowdowns/yr (approx 1/week) per compressor times 3 compressors per station / 2000 lbs/ton equals 0.19 tpy VOC's (rounded up to 0.5 tpy). VOC/blowdown calculation follows.

Facility Name: **Ponder Compressor Station**
Company: **Texas Midstream Gas Services, LLC**

HAP EMISSION SUMMARY (PTE)

Emission Units	Stack Ids	Formaldehyde (tpy) PTE	Benzene (tpy) PTE	Toluene (tpy) PTE	Ethylbenzene (tpy) PTE	Xylene (tpy) PTE	n-Hexane (tpy) PTE	Total (tpy) PTE
Compressor 1 (5794)	MC1973	0.20	negligible	negligible	negligible	negligible	negligible	0.20
Compressor 2 (5794)	MC2209	0.20	negligible	negligible	negligible	negligible	negligible	0.20
Compressor 3 (3516)	MC1989	0.49	negligible	negligible	negligible	negligible	negligible	0.49
Site Fugitives	FUG	negligible	negligible	negligible	negligible	negligible	negligible	negligible
Compressor Blowdowns[1]	FUG1	negligible	negligible	negligible	negligible	negligible	negligible	negligible
	TOTAL:	0.88	negligible	negligible	negligible	negligible	negligible	0.88

Facility:	Ponder Compressor Station
Facility Name:	Compressor 1 (5794) Compressor 2 (5794)
FIN/EPN:	C1 C2
New FIN/EPN:	MC1973 MC2209

EMISSION CALCULATIONS:

Methodology: Emission factors are from manufacturer's data (attached).

NMHC factor (0.27g/hp-hr used as VOC factor for safety.

Typical oxidative catalytic converter reductions taken below for Caterpillar G3516 LE (C3). Oxidative catalyst specifications can be provided upon request.

EPN:

	C1 Compressor 1 (5794)	C2 Compressor 2 (5794)
Engine Model:	Wauk 5794	Wauk 5794
Rated Horsepower:	1,380	1,380
Maximum runtime (hrs/year):	8,760	8,760
Ozone Operating Schedule (hr/day):	24	24
BTU/scf:	1,000	1,000
BTU/hp-hr:	7,500	7,500
Fuel Used (MMBTU/hr):	10.350	10.350
Fuel Used (Mscf/hr):	10.35	10.35
Fuel Used (MMscf/day):	0.248	0.248
Fuel Used (MMscf/yr):	90.67	90.67

EPN	Pollutant	Emission Factors (g/hp-hr or (lb/MMBTU) or (gr S/100 scf)	2008 lb/hr	2008 tpy	Post Converter/Certification lb/hr	Post Converter/Certification tpy	Converter Reduction	Catalytic Converter Methodology		Post-Conv. g/hp-hr
C1	NOx	13.9	42.29	185.22	1.48	6.48	96.50%			0.467
	CO	8.7	26.47	115.93	2.65	11.59	90.00%			0.870
	VOC	0.27	0.82	3.60	0.33	1.44	60.00%			0.108
	Formaldehyde	0.05	0.15	0.67	0.05	0.20	70.00%			0.015
	PM	*0.01941*	0.20	0.88	0.20	0.88	NA			NA
	SO2	*0.25*	0.0074	0.03	0.01	0.03	NA			NA
C2	NOx	13.9	42.29	185.22	1.48	6.48	96.50%			0.467
	CO	8.7	26.47	115.93	2.65	11.59	90.00%			0.870
	VOC	0.27	0.82	3.60	0.33	1.44	60.00%			0.108
	Formaldehyde	0.05	0.15	0.67	0.05	0.20	70.00%			0.015
	PM	*0.01941*	0.20	0.88	0.20	0.88	NA			NA
	SO2	*0.25*	0.01	0.03	0.01	0.03	NA			NA
TOTALS:	NOx		84.58	370.45	2.96	12.97				
	CO		52.94	231.86	5.29	23.19				
	VOC		1.64	7.20	0.66	2.88				
	Formaldehyde		0.30	1.33	0.09	0.40				
	PM		0.40	1.76	0.40	1.76				
	SO2		0.01	0.06	0.01	0.06				

Facility: Ponder Compressor Station
Emission Unit: Site Fugitives
Stack ID(s): FUG

Methodology

Emission factors are taken from a TNRCC internal memo dated January 3, 1996. Subject: Equipment Leak Factors for Oil and Gas Production Operations. Factors based on data collected by API. Stream VOC Wt% equals 1.25 from inlet gas analysis. VOC Wt% raised to 5% for safety.

Calculations

SOURCE	FACTOR	STREAM	COUNT	REDUCT'S	SOURCE	TONS/YR
API	0.00992	5.00%	67	0.0%	SYSTEM VALVES	0.15
API	0.01940	5.00%	8	0.0%	RELIEF VALVES	0.03
API	0.00441	5.00%	0	0.0%	OPEN ENDED LINES	0.00
API	0.01940	5.00%	3	0.0%	COMPRESSOR SEALS	0.01
API	0.00044	5.00%	300	0.0%	CONNECTIONS	0.03
					TOTAL	**0.22**

Facility: [redacted]er Compressor Station
Group:
Facility Name: [redacted]pressor 3 (3516)

FIN/EPN: C3

New FIN/EPN MC1989

EMISSION CALCULATIONS:

Methodology: Operating parameter adjustments to lower NOx emission factor to 0.7 g/hp-hr have been made to show compliance with DFW Eight-Hour Chapter 117 requlements. Please see oxidative catalytic converter quote for MC1989 Caterpillar 3516 reductions. CO factor raised for safety.

1340 hp Caterpillar 3615 pre-converter VOC and formaldehyde factors from manufacturers data.

PM emissions factors from AP-42. SO2 emissions are based on a maximum fuel sulfur content of 0.25 gr/100 scf (4 ppm H2S).

	Compressor 3 (3516)
Engine Model:	G3516LE
Rated Horsepower:	1,340
Maximum runtime (hrs/year):	8,760
Ozone Operating Schedule (hr/day):	24
BTU/scf:	1,000
BTU/hp-hr:	7,545
Fuel Used (MMBTU/hr):	10.110
Fuel Used (Mscf/hr):	10.11
Fuel Used (MMscf/day):	0.243
Fuel Used (MMscf/yr):	88.57

		Emission Factors	PTE		Post Converter/Certification					
EPN	Pollutant	[redacted]	lb/hr	tpy	lb/hr	tpy	Converter Reductions	Catalytic Converter Methodology		Post Conv g/bhp-hr
Compressor 3 (3516)	NOx	0.7	2.07	9.06	2.07	9.06	NA			NA
	CO	2.8	8.27	36.23	1.65	7.25	80.00%			0.560
	VOC	0.31	0.92	4.01	0.46	2.01	50.00%			0.155
	PM	9.99E-03	0.10	0.44	0.10	0.44	0.00%			NA
	SO2	0.25	0.0072	0.03	0.01	0.03	0.00%			NA
	Formaldehyde	0.25	0.74	3.23	0.11	0.49	85.00%			0.038

Texas Midstream Gas Services, LLC
Ponder Compressor Station

VOC Wt Percent from Inlet/Fuel Gas Mole Percent

	Mol Wt	*Fuel Gas Mol %*	*Mol Wt * Mol %*	*Wt %*		*Wt % HC*
N2	28.01	0.972	0.27	1.56		
CO2	44.01	2.626	1.16	6.64		
H2S	34.08	0	0.00	0.00		
C1	16.04	93.274	14.96	85.94		93.61
C2	30.07	2.731	0.82	4.72		5.14
C3	44.1	0.28	0.12	0.71		0.77
iC4	58.12	0.039	0.02	0.13		0.14
nC4	58.12	0.04	0.02	0.13		0.15
iC5	72.15	0.012	0.01	0.05		0.05
nC5	72.15	0.008	0.01	0.03		0.04
C6+	86.18	0.018	0.02	0.09		0.10
		100.00	17.41	100.00		100.00
					Wt% NMHC	6.39
					Wt% NMNEHC (VOC)	**1.25**
					Ratio NENMHC(VOC)/NMHC	**0.20**

Compressor Blowdown Calculations
VOC Emissions Quantification - Inputs and Volume Calculation Page

Company:	Texas Midstream Gas Services, LLC
Location:	Ponder Compresssor Station
County:	Denton County, TX
Compressor/Engine:	Ariel JGE-3 w/ 2-xx", & 1-xx" (or similar) cylinders/Cat 3516 or Waukesha 5794
Compressor Packager:	
No. of Units:	3
Unit Numbers:	
Date of Blowdown:	

Assumptions - NOTE: Inputs in RED, calculated values in BLUE.

380	scf/lb-mol	Purge Gas	
14.7	Standard Pressure (psia)	1	Valve Orifice (in)
60	Standard Temperature = Gas Temperature (°F)	5	Pressure Behind Valve (psi)
	Used Equation: P1V1/Z1 = P2V2/Z2	2	Duration (minutes)

Gas Analysis

Component	Analysis (mole %)
Nitrogen	1.051%
Carbon Dioxide	1.470%
Hydrogen Sulfide	0.000%
Methane	94.836%
Ethane	1.964%
Propane	0.580%
i-Butane	0.013%
n-Butane	0.021%
i-Pentane	0.010%
n-Pentane	0.013%
Cyclopentane	0.000%
n-Hexane	0.007%
Cyclohexane	0.000%
Other Hexanes	0.028%
Heptanes	0.000%
Methylcyclohexane	0.000%
Benzene	0.002%
Toluene	0.001%
Ethylbenzene	0.000%
Xylenes	0.000%
C8+ Heavies	0.002%
Total All Components	100.00%

Piping & Vessel Volume Inputs and Calculations

Piping Components	Dia. (inch)	Length (feet)	Pressure (psia)	acf	scf
Package Suction	8	16	350	5.6	140.1
1st Stage Suction	8	2	350	0.7	17.5
1st Stage Discharge	6	24	775	4.7	279.6
Second Stage Suction	6	48	775	9.4	559.2
Second Stage Discharge	4.5	24	1200	2.6	261.2
Package Discharge	4.5	20	1200	2.2	180.5

Vessel Components	Dia. (inch)	Length (inch)	Pressure (psia)	acf	scf
Suction Scrubber	30	72	350	29.4	739.1
1st Stg Suction Puls. Bottle	18	72	350	10.6	266.1
1st Stg Discharge Puls. Bottle	14	72	775	6.4	350.5
2nd Stage Scrubber	22	72	775	15.8	939.7
2nd Stg Suction Puls. Bottle	12	24	775	1.6	93.2
2nd Stg Discharge Puls. Bottle	10	32	1200	1.5	143.3

Cylinder Components	Bore (inch)	Stroke (inch)	# Cyl.	Pressure (psia)	acf	scf
First Stage	15.75	4.5	2	562.5	1.0	43.7
Second Stage	9.75	4.5	1	987.5	0.2	15.6

Cooler Components	Dia. (inch)	Length (feet)	# Tubes	Pressure (psia)	acf	scf
First Stage	1.375	17	46	475	0.7	24.4
Second Stage	1.38	17	35	1100	0.5	46.2

Purge Gas Volume

Q (Mcf/hr) = D(in)^2*P1(psi) (Page 278 of fourth edition of Pipeline Rules of Thumb Handbook)

scf = 166.7

TOTAL SCF: 4296.9

Compressor Blowdown Calculations
VOC Emissions Quantification - Emission Calculation Page

Company:	**Texas Midstream Gas Services, LLC**
Location:	**Ponder Compresssor Station**
County:	**Denton County, TX**
Compressor/Engine:	**Ariel JGE-3 w/ 2-xx", & 1-xx" (or similar) cylinders/Cat 3516 or Wauk 5794**
Compressor Packager:	**0**
Date of Blowdown:	**0-Jan-00**

4,296.9 scf per blowdown - from Volume Calculations on Page 1.

Component	Analysis (mole%)	Molecular Weight	scf/lb	Emissions (lb/ blowdown)	Emissions tons/blowdown
Nitrogen	0.684%	28.0134	13.565	2.2	0.0011
Carbon Dioxide	2.156%	44.01	8.634	10.7	0.0054
Hydrogen Sulfide	0.000%	34.082	11.150	0.0	0.0000
Methane	94.092%	16.043	23.686	170.7	0.0853
Ethane	2.701%	30.07	12.637	9.2	0.0046
Propane	0.265%	44.097	8.617	1.3	0.0007
I-Butane	0.030%	58.123	6.538	0.2	0.0001
n-Butane	0.037%	58.123	6.538	0.2	0.0001
i-Pentane	0.010%	72.15	5.267	0.1	0.0000
n-Pentane	0.009%	72.15	5.267	0.1	0.0000
Cyclopentane	0.000%	70.134	5.418	0.0	0.0000
n-Hexane	0.003%	86.177	4.410	0.0	0.0000
Cyclohexane	0.000%	84.161	4.515	0.0	0.0000
Other hexanes	0.012%	100.204	3.792	0.1	0.0001
Heptanes	0.002%	100.204	3.792	0.0	0.0000
Methylcyclohexane	0.000%	100.204	3.792	0.0	0.0000
Benzene	0.000%	78.114	4.865	0.0	0.0000
Toluene	0.000%	92.141	4.124	0.0	0.0000
Ethylbenzene	0.000%	106.167	3.579	0.0	0.0000
Xylenes	0.000%	106.167	3.579	0.0	0.0000
C8+ Heavies	0.000%	120	3.167	0.0	0.0000
Total All Components	100.0%				
		TOTAL VOC:		**2.10**	**0.0010**
		TOTAL HAPs:		**0.04**	**0.0000**

SECTION VI

Table 29
RECIPROCATING ENGINES

ENGINE DATA

Emission Point Number From Table 1(a) MC1989

Manufacturer Caterpillar

APPLICATION

X Gas Compression
____ Electric Generation
____ Refrigeration
____ Other (Specify)

Model No. G3516 LE
Serial No. WPW00883
Orig. Mfr. Date 4/18/2007
Rebuild Date(s) ____
No. of Cylinders V-16
Compression Ratio 8:1

X 4 Stroke Cycle X Carburetted X Spark Ignited ____ Dual Fuel
____ 2 Stroke Cycle ____ Fuel Injected ____ Diesel

Naturally Aspirated ____ Blower/Pump Scavenged ____ Turbocharged & I.C. X
Turbocharged ____ Intercooled (I.C.) ____ I.C. Water Temperature 130°F

Ignition/Injection Timing: ____ Fixed X Variable

	Mfg. Rating	Proposed Operating Range
Horsepower	1340	1340
Speed (rpm)	1400	1400

FUEL DATA

X Field Gas ____ Landfill Gas ____ LP Gas ____ Other
____ Natural Gas ____ Digester Gas ____ Diesel

Engine Fuel Consumption 7545 BTU/bhp-hr
Heat Value (specify units) 1006 HHV (HHV) (LHV)
Fuel Sulfur Content <0.25 gr/100 scf (grains/100 scf)(weight percent)

FULL LOAD EMISSIONS DATA

NO_x 0.7 g/bhp-hr CO 0.56 g/bhp-hr
____ ppmv ____ ppmv
VOC(C_3^+) 0.16 g/bhp-hr Total HC ____ g/bhp-hr
____ ppmv ____ ppmv

Attach information showing emissions versus engine speed and load.

Method of Emissions Control:

X Lean Operation X Parameter Adjustment ____ SCR Catalyst
____ Stratified Charge ____ NSCR Catalyst X Other (Specify)
Oxidative Catalyst and air/fuel ratio controller

ADDITIONAL INFORMATION

On separate sheets attach the following:

A. A copy of engine manufacturer's site rating or general rating specification for the engine model.
B. Typical fuel analysis, including sulfur content and heating value. For gaseous fuels, provide mole percent of constituents.
C. Description of air/fuel ratio control system (manufacturer's information acceptable).
D. Details regarding principle of operation of emissions controls. If add-on equipment is used, provide make and model and manufacturer's information.
E. Exhaust parameter information on Table 1(a).

G3516 LE

GAS COMPRESSION APPLICATION

GAS ENGINE SITE SPECIFIC TECHNICAL DATA

CATERPILLAR®

ENGINE SPEED (rpm):	1400	FUEL SYSTEM:	HPG IMPCO WITH AIR FUEL RATIO CONTROL
COMPRESSION RATIO:	8:1		
AFTERCOOLER WATER INLET (°F):	130	SITE CONDITIONS:	
JACKET WATER OUTLET (°F):	210	FUEL:	Nat Gas
COOLING SYSTEM:	JW+OC , AC	FUEL PRESSURE RANGE(psig):	35.0-40.0
IGNITION SYSTEM:	ADEM3	FUEL METHANE NUMBER:	84.8
EXHAUST MANIFOLD:	ASWC	FUEL LHV (Btu/scf):	905
COMBUSTION:	Low Emission	ALTITUDE(ft):	500
NOx EMISSION LEVEL (g/bhp-hr NOx):	1.5	MAXIMUM INLET AIR TEMPERATURE(°F):	77
SET POINT TIMING:	33.0	NAMEPLATE RATING:	1340 bhp@1400rpm

			MAXIMUM RATING	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
RATING	NOTES	LOAD	100%	100%	75%	50%
ENGINE POWER	(1)	bhp	1340	1340	1005	670
INLET AIR TEMPERATURE		°F	77	77	77	77
ENGINE DATA						
FUEL CONSUMPTION (LHV)	(2)	Btu/bhp-hr	7545	7545	7806	8286
FUEL CONSUMPTION (HHV)	(2)	Btu/bhp-hr	8369	8369	8659	9191
AIR FLOW	(3)	lb/hr	12795	12795	9896	6263
AIR FLOW WET (77°F, 14.7 psia)	(3)	scfm	2886	2886	2232	1413
INLET MANIFOLD PRESSURE	(4)	in Hg(abs)	69.9	69.9	55.0	39.1
EXHAUST STACK TEMPERATURE	(5)	°F	854	854	840	842
EXHAUST GAS FLOW (@ stack temp, 14.5 psia)	(6)	ft3/min	7651	7651	5853	3738
EXHAUST GAS MASS FLOW	(6)	lb/hr	13305	13305	10292	6543
EMISSIONS DATA						
NOx (as NO2)	(7)	g/bhp-hr	1.50	1.50	1.50	1.50
CO	(7)	g/bhp-hr	1.89	1.89	1.96	1.90
THC (molecular wt. of 15.84)	(7)	g/bhp-hr	3.07	3.07	3.40	3.60
NMHC (molecular wt. of 15.84)	(7)	g/bhp-hr	0.46	0.46	0.51	0.54
NMNEHC (molecular wt. of 15.84)	(7)	g/bhp-hr	0.31	0.31	0.34	0.36
HCHO (Formaldehyde)	(7)	g/bhp-hr	0.25	0.25	0.28	0.30
CO2	(7)	g/bhp-hr	491	491	508	539
EXHAUST OXYGEN	(8)	% DRY	8.3	8.3	8.0	7.8
HEAT REJECTION						
HEAT REJ. TO JACKET WATER	(9)	Btu/min	41538	41538	34738	29885
HEAT REJ. TO ATMOSPHERE	(9)	Btu/min	5313	5313	4428	3543
HEAT REJ. TO LUBE OIL	(9)	Btu/min	6195	6195	5181	4457
HEAT REJ. TO AFTERCOOLER	(9)(10)	Btu/min	10426	10426	7047	2497

HEAT EXCHANGER SIZING CRITERIA			
HEAT REJ. TO JACKET WATER/LUBE OIL CIRCUIT	(10)	Btu/min	53126
HEAT REJ. TO AFTERCOOLER	(10)(11)	Btu/min	10947
A cooling system safety factor of 0% has been added to the heat exchanger sizing criteria.			

CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature.
100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature.
Max. rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature.
Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

PREPARED BY:
Data generated by Gas Engine Rating Pro Version 3.00.00
Ref. Data Set DM8542-01-003, Printed 28Sep2007

Caterpillar G3516 Oxidative Catalytic Converter (Typical or Similar)

WAUKESHA-PEARCE INDUSTRIES, INC. - HOUSTON, TEXAS

Houston, Texas (phone) 713-723-1050

QUOTE / PERFORMANCE WORKSHEET

CUSTOMER:	
REQUIRED EMISSIONS:	Oxidation Converter
EQUIPMENT LOCATION:	Unspecified
ADDITIONAL COMMENTS:	
DATE:	03/03/05

SITE CONDITIONS

			INPUTS
Engine Make / Model	Caterpillar G.3516 LE AFRC		
Engine Horsepower	1,340	Maximum	HHV
Engine RPM	1,400	Maximum	1,015
Fuel Type	CQNG or Analysis		
Engine Exhaust Temperature	855	°F (±50°F)	BSFC
Engine Exhaust Flow	7,685	acfm	7,546
Converter Flange Size	Specify On Order	inches	
Oxygen in Engine Exhaust	8.30	Percent	Prox

Engine Emissions	Manufacturers or Site Data		TPY
NOx	1.50	g/BHP-Hr	19.4
CO	1.90	g/BHP-Hr	24.6
NMHC	0.46	g/BHP-Hr	6.0
CH2O	0.300	g/BHP-Hr	3.9
		Prox Engine TPY	[illegible]

Post Converter Emissions				- TPY
NOx	0.0	1.50	g/BHP-Hr	19.4
CO	93.5	0.12	g/BHP-Hr	1.6
NMHC	56.0	0.20	g/BHP-Hr	2.6
CH2O	93.5	0.020	g/BHP-Hr	0.3
			Prox Post TPY	[illegible]
			Prox Ttl Reduction	55.6%

NOTE: All HC reductions are temperature dependent.
NOTE: Conversion rates are subject to +/-3% factor.
NOTE: Converter Flange Sizes to be determined but will not effect prices.

QUOTED EQUIPMENT

Description	Model / Data	Net per System
WPI Powerhouse ® STD	611	
ADDITIONAL ITEMS:		
Thermocouples >4 - CC / AFR		
Power Supply or DC Required		
Thermocouple Wire (As Req)		
Safety Shutdown - (AFR)		
O2 Sensor Adaptor (>2)		
Crankcase Extractor System		

TOTAL NUMBER OF UNITS: 1 TOTAL COST: 1

***** *SUBJECT TO THE ATTACHED PERFORMANCE / LIMITED WARRANTY STATEMENT* *****

Special Notes - Assumed Good Fuel / Manufacturer Published Engine Emissions

Prox Backpressure "w.c. 4 Calculated S.V. = 128,638 hr-1

Converter NOx PPMv =- 214 / CO PPMv =- 31 / NMHC PPMv =- 81

BY: [illegible] Digitally signed by Patrick Copitus DN: CN = Patrick Copitus, C = US [illegible] Date: 2005.03.03 09:26:48 -06'00'

REF:

The Power People ®

A Pearce Industries, Inc. Company

COMPANY: TEXAS MIDSTREAM GAS SERVICES, LLC	CHECK REQUEST FORM
REQUEST BY: Kristin Knapp	**DATE:** 02/17/2010
PAYABLE TO: Texas Commission on Environmental Quality	**AMOUNT:** $450.00
ADDRESS: P.O. Box 13088	
CITY: Austin **STATE:** TX **ZIP:** 78711-3088	
CONTACT: Kristin Knapp **PHONE:** 405-935-3690	
SOCIAL SECURITY # OR TAX ID #:	

PAYABLE FOR:

*** Ponder Compression Facility**

PBR Modification Application - #616437

*** Please print facility name on check**

REQUIRED WHEN: ASAP	**MAIL CHECK:** _ Yes XX No **Please deliver to Kristin Knapp (1 Grand – 645)**
SIGNED: Kristin Knapp **DATE:** 2-17-10	**APPROVED:** OK Paula 4070 **DATE:** 2/17/2010

ACCOUNTING USE ONLY

CHECK NO:	DATE:	CODING:

Attachment 2

Chesapeake ENERGY

Regulatory Department

December 3, 2010

VIA CERTIFIED MAIL # 7008 1830 0002 5134 6231

Director; Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

Re: NSPS Subpart JJJJ and 30 TAC § 117 Results of Performance Testing
Texas Midstream Gas Services (TMGS)
Ponder Compressor Station – RN105354062

To Whom It May Concern:

Per 40 C.F.R. § 60.4245(d) and 30 TAC § 117.2135(d)(9), TMGS is submitting the results of performance testing for unit MC2209 (C-17694/1), an affected facility as defined by NSPS Subpart JJJJ and 30 TAC § 117. The test report is enclosed. If you have any questions, please contact me at (405) 935-6113 or by email at CMAirGroup@chk.com.

Sincerely,

Hillary Moseley

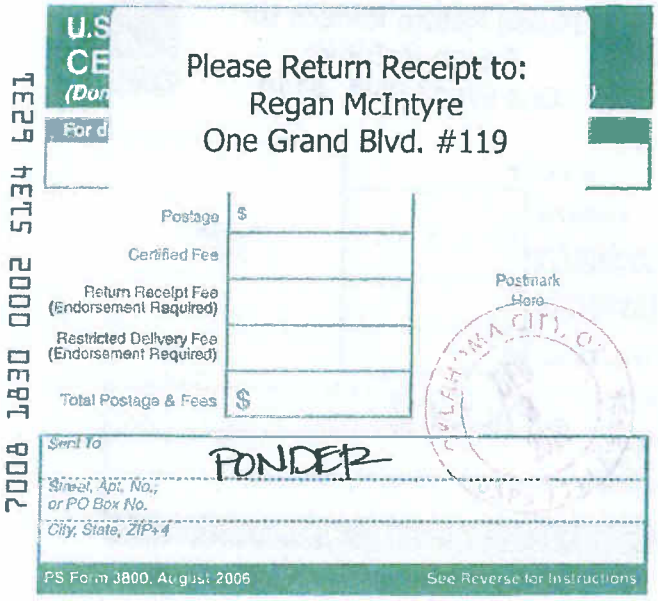
Hillary Moseley
Corporate Air Coordinator - Midstream
Chesapeake Energy

Enclosure: Test Reports

cc: Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
12100 Park 35 Circle, Building C
Austin, Texas 78753
VIA CERTIFIED MAIL # 7008 1830 0002 5134 6255

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, TX 76118-6951
VIA CERTIFIED MAIL # 7008 1830 0002 5134 6262

Field Operations Support Division (FOSP)
TCEQ, MC-174
12100 Park Circle, Building A
Austin, TX 78753
VIA CERTIFIED MAIL # 7008 1830 0002 5134 6279



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Please Return Receipt to:
Regan McIntyre
One Grand Blvd. #119

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To PONDER
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

7008 1830 0002 5134 6231

Ponder

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Director, Air, Pesticides, and Toxics Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X EPA REGION 6 ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

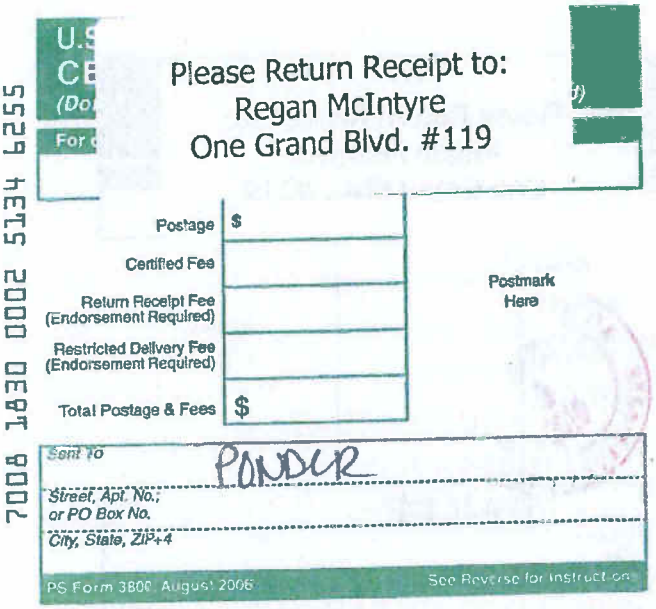
DEC 06 2010

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 1830 0002 5134 6231

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540



7008 1830 0002 5134 6255

Please Return Receipt to:
Regan McIntyre
One Grand Blvd. #119

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To PONDER
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Ponder

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Dana Vermillion
Texas Commission on Environmental Quality
New Source Review/MC-163
12100 Park 35 Circle, Building C
Austin, Texas 78753

COMPLETE THIS SECTION ON DELIVERY

Signature
X Cumberlander ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

RECEIVED
DEC 06 2010
TCEQ MAIL CENTER
MB

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

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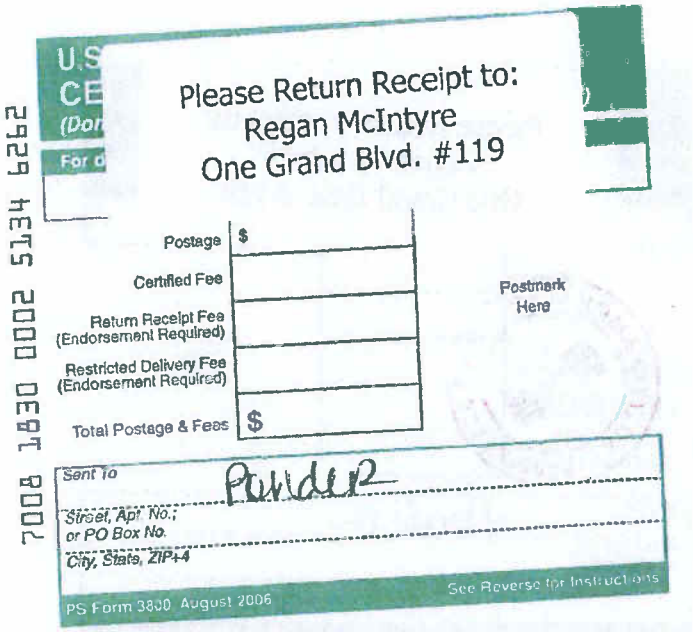

Ponder

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Tony Walker
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, TX 76118-6951

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☐ Agent ☐ Addressee

B. Received by (Printed Name) Marilynn Stubits

C. Date of Delivery 12/17/07

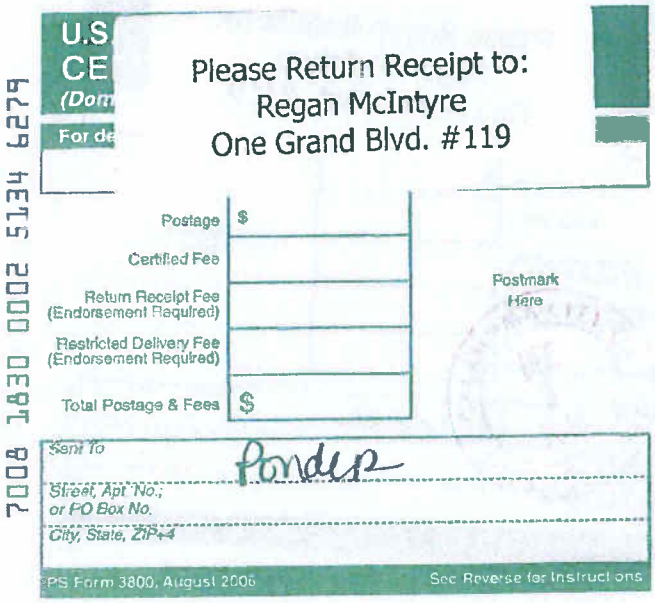
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7008 1830 0002 5134 6262

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540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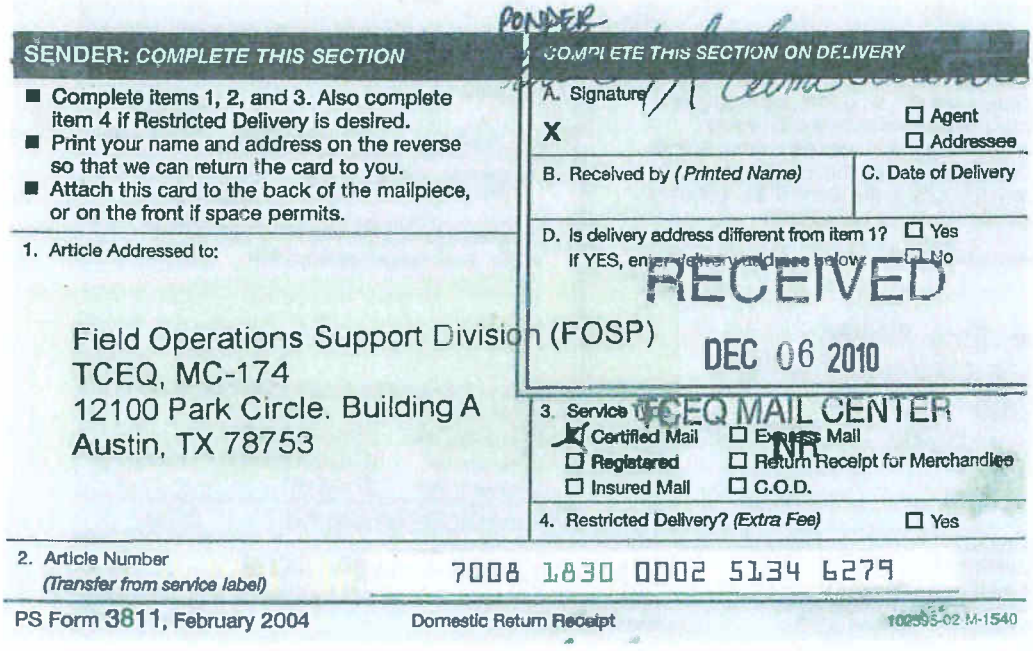
Please Return Receipt to:
Regan McIntyre
One Grand Blvd. #119
Postage $
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $
Postmark Here
7008 1830 0002 5134 6279
Sent To
Ponder
Street, Apt. No.; or PO Box No.
City, State, ZIP+4
PS Form 3800, August 2006
See Reverse for Instructions


PONDER
SENDER: COMPLETE THIS SECTION
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
Print your name and address on the reverse so that we can return the card to you.
Attach this card to the back of the mailpiece, or on the front if space permits.
1. Article Addressed to:
Field Operations Support Division (FOSP)
TCEQ, MC-174
12100 Park Circle. Building A
Austin, TX 78753
COMPLETE THIS SECTION ON DELIVERY
A. Signature
X
Agent
Addressee
B. Received by (Printed Name)
C. Date of Delivery
D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
RECEIVED
DEC 06 2010
TCEQ MAIL CENTER
3. Service Type
Certified Mail
Express Mail
Registered
Return Receipt for Merchandise
Insured Mail
C.O.D.
4. Restricted Delivery? (Extra Fee) Yes
2. Article Number (Transfer from service label)
7008 1830 0002 5134 6279
PS Form 3811, February 2004
Domestic Return Receipt
102595-02-M-1540

EMISSIONS TEST REPORT

Summary of Testing Performed On:

Waukesha L5794GSI Compressor Engine
Unit Number MC2209 (S/N C-17694/1)

located at the

Ponder Compressor Station
for
Texas Midstream Gas Services

October 5, 2010

MidCon Project Number: MCET 104097

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This Emissions Test Report has been reviewed for completeness and accuracy and has been determined to be an accurate and true representation of the actual emissions generated during the testing event.

James Mode

Digitally signed by James Mode
DN: dc=net, dc=chkenergy, ou=Users and Groups, cn=James Mode, email=James.Mode@chk.com
Date: 2010.12.03 11:36:44 -06'00'

James Mode, QSTI
Environmental Health & Safety Specialist
MidCon Compression

INTRODUCTION

MidCon Compression, LLC Emissions Testing department conducted source emissions testing for Texas Midstream Gas Services on one natural gas fired engine, Unit Number MC2209, located at the Ponder Compressor Station in Denton County, Texas. This engine is equipped with the following control equipment: NSCR. The purpose of this test was to determine the emissions of oxides of nitrogen (NOx), carbon monoxide (CO), and nonmethane hydrocarbons (NMHC) being emitted to the atmosphere via the engine exhaust stack. The test of MC2209 fulfills the performance test requirements of 30 TAC § 117; 30 TAC § 106 and Title 40 of the Code of Federal Regulations, Part 60 (40 CFR60), Subpart JJJJ. The unit is authorized to operate under permit number 82981.

The results of this testing, performed on October 5, 2010, show that the engine is in compliance with the specified regulations.

Mr. Steve Bornsen with MidCon Compression performed all testing and generated this report. The sampling followed the procedures set forth in 40CFR60, Appendix A, Methods 3A, 4, 7E, 10, 19, 25A, 205, and ASTM D6522-00. Testing was performed while the engine was operated at an average of 1054 bhp @ 1152 rpm, 76% of the engine's rated capacity of 1380 bhp @ 1200 rpm.

SUMMARY OF TEST RESULTS

Texas Midstream Gas Services
Pondar Compressor Station
MC2209
C-17694/1

			Oxides of Nitrogen			Carbon Monoxide			Non Methane Hydrocarbons[2]			Oxygen Conc (% vol.)	Percent Moisture	Unit Load (bhp)
RUN	DATE	TIME	dry ppm	g/BHP-hr	TPY	dry ppm	g/BHP-hr	TPY	wet ppm	dry ppm	corr. ppm[1]			
1	10/5/10	0755 - 0855	9.54	0.03	0.38	137.66	0.30	3.36	0.00	0.00	0.00	0.00	20.03	1057
2	10/5/10	0906 - 1006	8.17	0.03	0.33	120.66	0.26	2.95	0.00	0.00	0.00	0.00	19.83	1053
3	10/5/10	1015 - 1115	9.81	0.03	0.39	132.71	0.29	3.22	0.00	0.00	0.00	0.00	21.85	1053
	Averages			0.03	0.37		0.28	3.18			0.00	0.00		1054
Allowable Emission Rate per TAC 117.2110			---	0.5	---	---	3.0	---	---	---	---	---	---	---
Allowable Emission Rate per 40CFR60 Subpart JJJJ			---	2.0	---	---	4.0	---	---	---	86.0	---	---	---
Allowable Emission Rate per PBR			---	0.487	6.48	---	0.870	11.59	---	---	---	---	---	---

O_2 F_d Factor = 8631 dscf/million Btu

Brake Specific Fuel Consumption = 7601 Btu/HP-hr

Load = 76.40% %[3]

[1] corrected to 15% O_2
[2] as propane; NMHC calculated using Eq. 1065.660-2
[3] percent of maximum rated horsepower

DISCUSSION OF SAMPLING RESULTS

Oxides of Nitrogen

The three tests for oxides of nitrogen (NO_x) were a valid representation of the actual emissions. Calibration error tests on the oxides of nitrogen analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 0.52% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

A nitrogen dioxide to nitrogen oxide ($NO_2 \rightarrow NO$) conversion efficiency test was performed on the day of testing. The response of the analyzer was stable and confirmed that the allowable conversion efficiency of 90% was met therefore resulting in valid test.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Carbon Monoxide

The three tests for carbon monoxide (CO) were a valid representation of the actual emissions. Calibration error tests on the carbon monoxide analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 1.40% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Nonmethane Hydrocarbons

The three tests for nonmethane hydrocarbons (NMHC) were a valid representation of the actual emissions. Calibration error tests on the NMHC analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 25A, Section 8.4 and showed no results greater than 3.21% compared to the allowable 5.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and

showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests were adjusted to a dry ppm basis utilizing equation 1 from EPA's Air Quality and Planning Standards, Basic Concepts in Environmental Sciences, Module 2. Nonmethane hydrocarbon results were calculated using equation 1065.66-2 from CFR 1065.265.

Oxygen

The three tests for oxygen (O_2) were a valid representation of the actual emissions. Calibration error tests on the oxygen analyzer were performed prior to testing following procedures detailed in 40CFR60, App. A, Method 7E, Section 8.2.3 and showed no results greater than 0.46% compared to the allowable 2.0% calibration error. Calibration drift checks were performed prior to and immediately following the completion of each test run. These tests were stable and showed no variation greater than the allowed 3.0% calibration drift. All bias tests were valid with no bias results greater than the allowed 5.0% system bias.

Each of the results from the three tests was adjusted utilizing equation 7E-5 from 40CFR60, App. A, Method 7E.

Moisture

The three tests for moisture appeared to be a valid representation of the actual emissions. All samples were collected following the procedures set forth in 40CFR60, Appendix A, Method 4.

PROCESS DESCRIPTION

The Ponder Compressor Station is used to boost the pressure of sweet natural gas to a natural gas transportation system. Sweet natural gas from the inlet separator is compressed by three compressor engines. Compressor discharge enters the glycol dehydrators before exiting the station.

DESCRIPTION OF SAMPLING LOCATION

The exhaust stack on the Waukesha L5794GSI engine, Unit Number MC2209, located at the Ponder Compressor Station, is approximately 22 feet above the ground. The sampling was performed at the exhaust of the stack. A schematic of this sampling location is provided in Attachment B.

SAMPLING AND ANALYTICAL PROCEDURES

All testing followed the procedures set forth in 40CFR60, App. A, Methods 3A, 4, 7E, 10, 19, 25A, 205, ASTM D6522-00 The reference method monitors were leak checked at the end of the sampling probe before sampling and again at the conclusion of sampling. Samples of sixty-minute duration were taken from the exhaust stack for each of three test runs.

Oxides of Nitrogen

NO_x sampling was performed following all guidance in EPA Method 7E. A California Analytical Instruments model 600 oxides of nitrogen analyzer (serial number W05006) was used to monitor the concentrations of oxides of nitrogen during each run. The reference method analyzer was operated in the NO_x mode at a calibration span of 75.2 ppm. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check and a NO_2 to NO conversion efficiency test were also conducted. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
37.6 ppm Nitric Oxide in Nitrogen
75.2 ppm Nitric Oxide in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located more than 4.0 diameters from the outlet of the engine exhaust stack.

Carbon Monoxide

CO sampling was performed following all guidance in EPA Method 10. A California Analytical Instruments model 601P carbon monoxide analyzer (serial number W05004-M) was used to monitor the concentrations of carbon monoxide during each run. The reference method analyzer was operated at a calibration span of 389.0 ppm. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check was also performed prior to testing. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
194.5 ppm Carbon Monoxide in Nitrogen
389.0 ppm Carbon Monoxide in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located more than 4.0 diameters from the outlet of the engine exhaust stack.

Nonmethane Hydrocarbons

The gaseous total hydrocarbons and nonmethane hydrocarbons were performed following all guidance in EPA Method 25A. A continuous sample of the flue gas was delivered to a California Analytical Instruments model 600M-HFID nonmethane hydrocarbon analyzer (serial number W05005) through a heated sample line (maintained above 230° F). The reference method analyzer was operated at a calibration span of 1000.0 ppm.

This instrument utilizes the principle of Flame Ionization Detection (FID) to determine the total hydrocarbons within a gaseous sample. The MHFID analyzer has a heated oven (191° C) which contains a burner and an optional heated pump. The small flame of the burner is elevated and sustained by the regulated flows of air and a 40/60 mixture of hydrogen and helium. The split ring detector contains 2 electrodes. One electrode is negatively polarized using a precision power supply and the other electrode, known as the "collector" is connected to a high impedance, low noise electronic amplifier. The two electrodes establish an electrostatic field. When a gaseous sample is introduced to the burner, it is ionized in the flame and the electrostatic field causes the charged particles (ions) to migrate to their respective electrodes. The migration creates a small current between the electrodes. This current is measured by the precision electrometer amplifier and is directly proportional to the hydrocarbon concentration of the sample. The methane mode provides for measuring methane only or total hydrocarbons and calculates, displays and outputs the sample's NMHC content. The nonmethane cutter's catalyst removal efficiency is greater than 98% for ethane and heavier hydrocarbons and better than 90% for methane retention. The current is converted to a voltage output and recorded continuously on the computerized data acquisition system.

This instrument is calibrated using EPA Protocol Number 1, National Institute of Standards and Technology (NIST) concentrations of propane in nitrogen (N_2) and methane in nitrogen (N_2) or oxygen (O_2). A single opening stainless steel probe will be used to collect the sample. The sample gas to the analyzer will pass through an

in-stack filtering system to remove particulate matter. Calibration and linearity checks are performed through the entire sampling system before and after each test period. "Zero drift" checks are made after each run to adjust the concentration bias due to drift. All parts of the sample extraction system are heated to a temperature of at least 230°F, and the analyzer detector is heated to a temperature of at least 250°F. The calibration gases used during all sampling were as follows:

Zero Air
303.1 ppm Propane in Nitrogen
477.2 ppm Propane in Nitrogen
831.0 ppm Propane in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

Oxygen

O_2 sampling was performed following all guidance in EPA Method 3A. A California Analytical Instruments model 601P oxygen analyzer (serial number W05004-M) was used to monitor the concentrations of oxygen during each run. The reference method analyzer was operated at a calibration span of 20.98%. A multi-point calibration error check was performed prior to testing on the reference method analyzer. A sample system bias check was also performed prior to testing. After each run, the calibration drift of the analyzer was checked. The calibration gases used during all sampling were as follows:

Zero Nitrogen
9.98% Oxygen in Nitrogen
20.98% Oxygen in Nitrogen

An EPA Protocol Gas Certificate of Analysis for each gas is included in Appendix B.

The reference method sampling system consisted of a stainless steel probe, a heated Teflon® sample line (maintained above 230° F), a moisture removal system and a Teflon® sample line. Calibration gases for the bias and drift checks were introduced at the outlet of the stainless steel probe. Triplicate samples of sixty minute duration were taken from a single traverse point located more than 4.0 diameters from the outlet of the engine exhaust stack.

Moisture

The flue gas moisture content was determined according to the sampling and analytical procedures outlined in EPA Method 4. Four impingers were connected in series and contained 100ml of water in each of the first two impingers followed by a dry impinger and a fourth impinger containing silica gel. The impingers were

contained in an ice bath in order to assure condensation of the moisture in the flue gas stream. The silica gel outlet temperature was maintained below 68°F. Any moisture that was not condensed in the impingers was captured in the silica gel; therefore, all condensation was weighed and entered into the moisture content calculations.

Volumetric Flow Rate and Heat Input – EPA Method 19

The volumetric flow rate was determined according to the procedures outlined in EPA Method 19. The fuel flow rate and the heat content of the fuel were used to calculate the gas volume produced from the products of combustion.

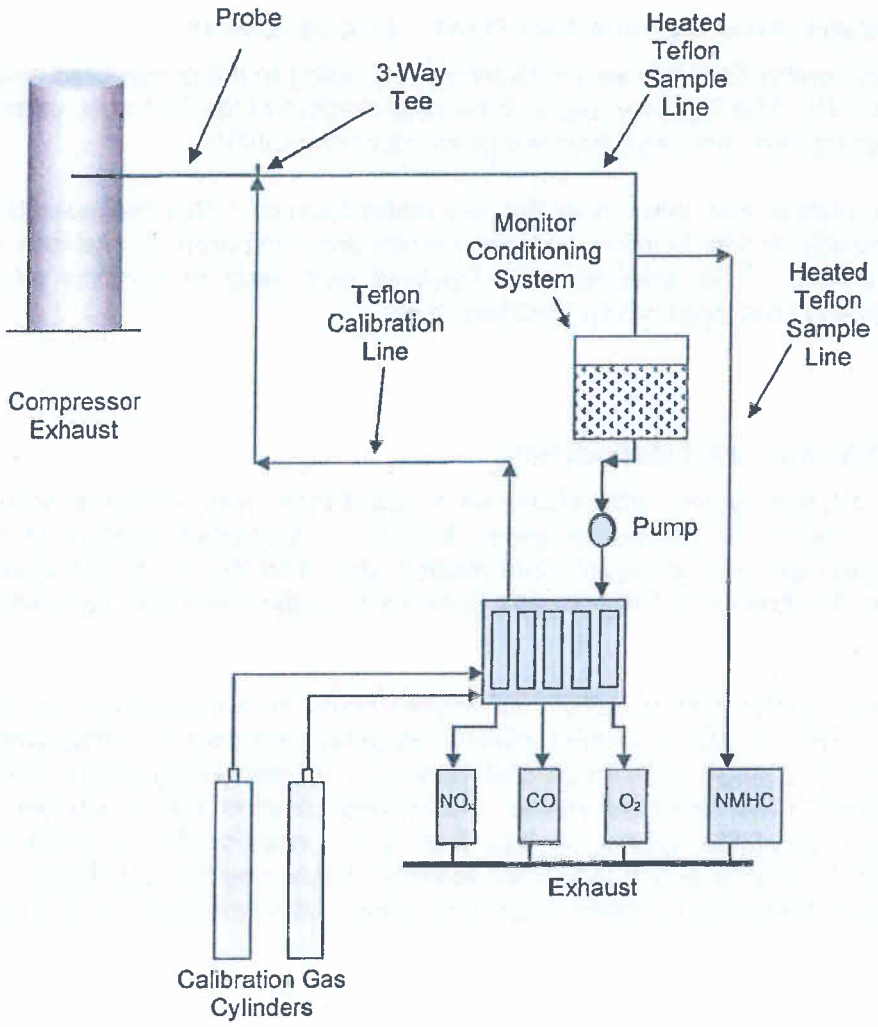
A fuel sample was taken near the fuel meter location. This fuel sample is collected periodically at this location and the results are compared to previous samples for consistency. This analysis was provided and used to perform all calculations concerning heat input values and flow rates.

Gas Dilution – EPA Method 205

A gas dilution system, also known as a gas divider, was utilized in order to provide known values of calibration gases through a controlled dilution of a high-level calibration gas with an appropriate dilution gas. The high-level gas used for dilution met all standards of a Protocol gas as set forth by the 40CFR60, Appendix A, Method 7E.

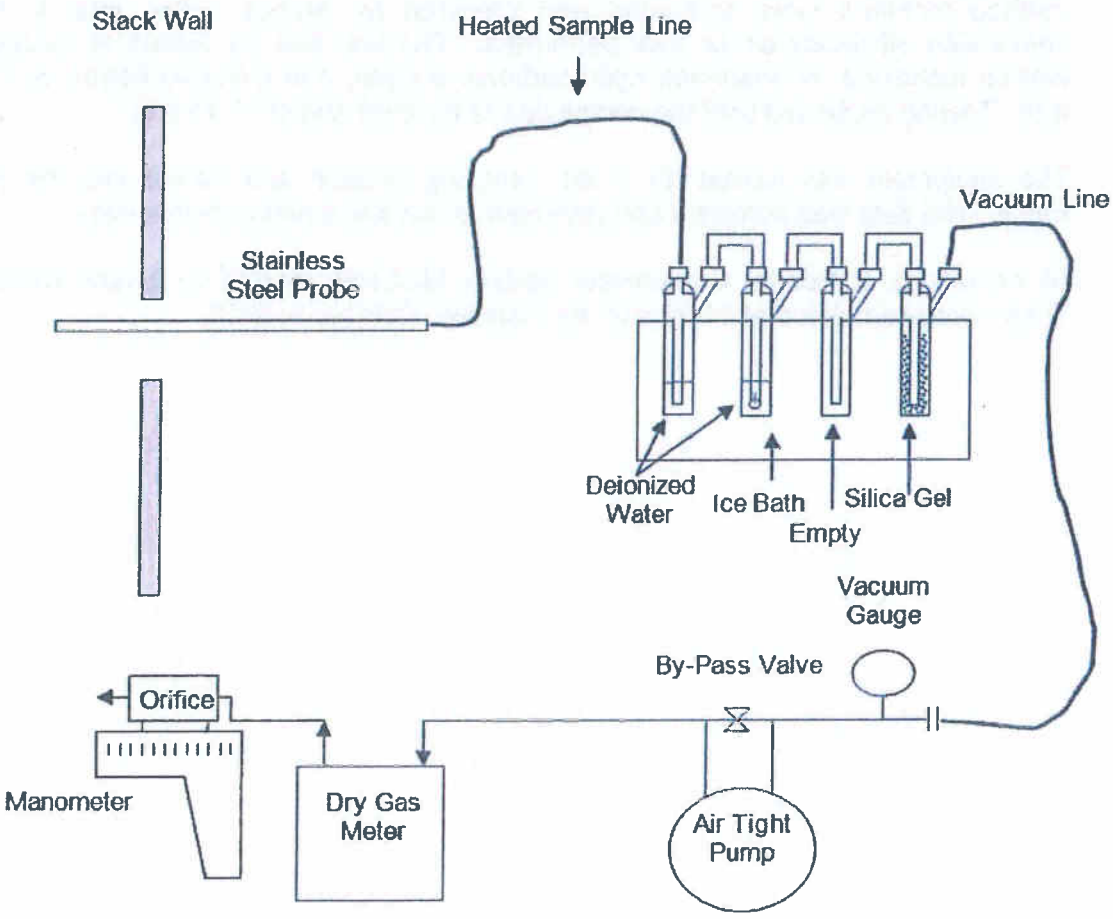
The gas divider met all calibration requirements as requirements set forth in EPA Method 205. A field evaluation check was performed prior to testing where triplicate dilutions of a single high-range calibration gas utilized during testing was made and compared to the expected values. All of these dilution checks showed a deviation from the expected values of less than 2%. Additionally, a mid-level gas was introduced directly to the calibrated analyzer, bypassing the gas divider system, and showed a difference between actual and measured concentrations of less than 2%.

Reference Method Monitors Sampling System
(EPA Methods 3A, 7E, 10 and 25A)



Moisture Sampling System

(EPA Method 4)



DESCRIPTION OF TESTS

Personnel from MidCon Compression arrived at the Ponder Compressor Station, located in Denton County, Texas at 7:00 a.m. on Tuesday, October 5, 2010. The equipment was moved onto the MC2209 engine exhaust stack. The reference method monitors were calibrated and prepared for testing. The NO_2 to NO conversion efficiency check was performed. The first test for oxides of nitrogen, carbon monoxide, nonmethane hydrocarbons, oxygen, and moisture began at 7:55 a.m. Testing continued until the completion of the third test at 11:15 a.m.

The equipment was moved off of the sampling location and loaded into the test trailer. The data was compiled and reviewed for accuracy and completeness.

All operations at Ponder Compressor Station, MC2209, located in Denton County, Texas were completed at 11:30 a.m. on Tuesday, October 5, 2010.

Appendix A. Example Calculations

NOMENCLATURE

$BSFC$	Brake Specific Fuel Consumption
B_{ws}	Proportion of water vapor, by volume, in the gas stream
C_{avg}	Average unadjusted gas concentration indicated by data recorder for the test run
C_d	Concentration of gas on a dry basis
C_{gas}	Average effluent gas concentration adjusted for bias calibrations
C_m	Average of the initial and final system calibration bias check for the upscale gas
C_{ma}	Actual concentration of the upscale calibration gas
C_o	Average of the initial and final system calibration bias check for the zero gas
C_w	Concentration of gas on a wet basis
CF	Conversion Factor from ppm to lbs./scf -NO_x 1.194×10^{-7} -CO 7.273×10^{-8} -THC 1.145×10^{-7}
CH_4	Methane
CO	Carbon Monoxide
$DSCFH$	Dry standard cubic feet per hour
F_d	Oxygen based F factor
FID	Flame Ionization Detector
FR	Flow Rate of exhaust gas (DSCFH)
$g/BHP-hr$	Grams per brake horsepower hour
ΔH	Average differential pressure across the orifice meter ("H_20)
$lbs.$	Pounds
$lbs./hr.$	Pounds per hour
$M_{\%}$	Percentage of moisture in gas sample
$NMHC$	Nonmethane Hydrocarbon
NOX	Oxides of nitrogen
O_2	Oxygen
O_{2meas}	Average O_2 measured over test period (%)
ppm	Parts per million
ppm_{CH4}	Concentration of methane
ppm_{corr}	ppm corrected to 15% O_2
ppm_{NMHC}	Concentration of NMHC
$ppm_{NMHCcont}$	Initial NMHC contamination fraction, according to § 1065.520
ppm_{THC}	Concentration of THC, as measured by the THC FID
P_b	Barometric pressure
PF_{CH4}	Nonmethane cutter CH4 penetration fraction, according to § 1065.365

NOMENCLATURE (cont.)

PF_{C2H6}	Nonmethane cutter CH4 penetration fraction, according to § 1065.365
Q	Volumetric flow rate (DSCFH)
RF_{CH4}	Response factor of THC FID to CH4 according to § 1065.365
scf	Standard cubic feet
T_m	Average dry gas meter temperature (°F)
THC	Total Hydrocarbons
TPY	Tons per year
V_m	Volume of gas sample as measure by the dry gas meter (dcf)
V_{mstd}	Volume of gas sampled measured by the dry gas meter, corrected to standard conditions (dscf)
V_w	Total volume of liquid collected in impingers and silica gel
V_{wstd}	Volume of water vapor in the sample (scf corrected to standard conditions)
Y	Dry gas meter calibration factor

Example Equations

1. Correction of concentration using bias calibrations (Equation 7E-5b):

$$C_{gas} = (C_{avg} - C_o)\frac{C_{ma}}{C_m - C_o}$$

2. Calculation of Exhaust Flow Rate:

$$FR = \frac{BSFC \times F_d \times 20.9}{(20.9 - O_{2meas})}$$

3. Converting ppm to g/bhp-hr:

$$g/BHP-hr = \frac{Q \times F_d \times BSFC \times CF \times 453.6\frac{g}{lb} \times 20.9}{1{,}000{,}000 \times (20.9 - O_{2meas})}$$

4. Correction of actual ppm concentrations to 15% O_2 (40CFR60, App. B, Performance Specification 2, Equation 2-2):

$$ppm_{corr} = ppm \times \left(\frac{20.9 - 15}{20.9 - O_{2meas}}\right)$$

5. Converting ppm to lbs./hr.:

$$lbs./hr. = ppm \times FR \times CF$$

6. Converting lbs./hr. to TPY:

$$TPY = \frac{lbs./hr. \times 8760}{2000}$$

7. Calculation of Nonmethane Hydrocarbons (Equation 1065.660-2):

$$ppm_{NMHC} = \left[\frac{(RF_{CH4} \times ppm_{THC}) - (RF_{CH4} \times ppm_{CH4})}{(RF_{CH4} - RF_{C2H6})}\right] - ppm_{NMHCmix}$$

Example Equations (cont.)

8. Conversion from wet ppm to dry ppm (Equation 7E-10):

$$C_d = \frac{C_w}{(1 - B_{ws})}$$

9. Calculating Volume of Water Vapor Condensed (Equation 5-2):

$$V_{wstd} = 0.04706 \times V_{lc}$$

10. Calculation of Moisture Content of Sample (Equation 5-3):

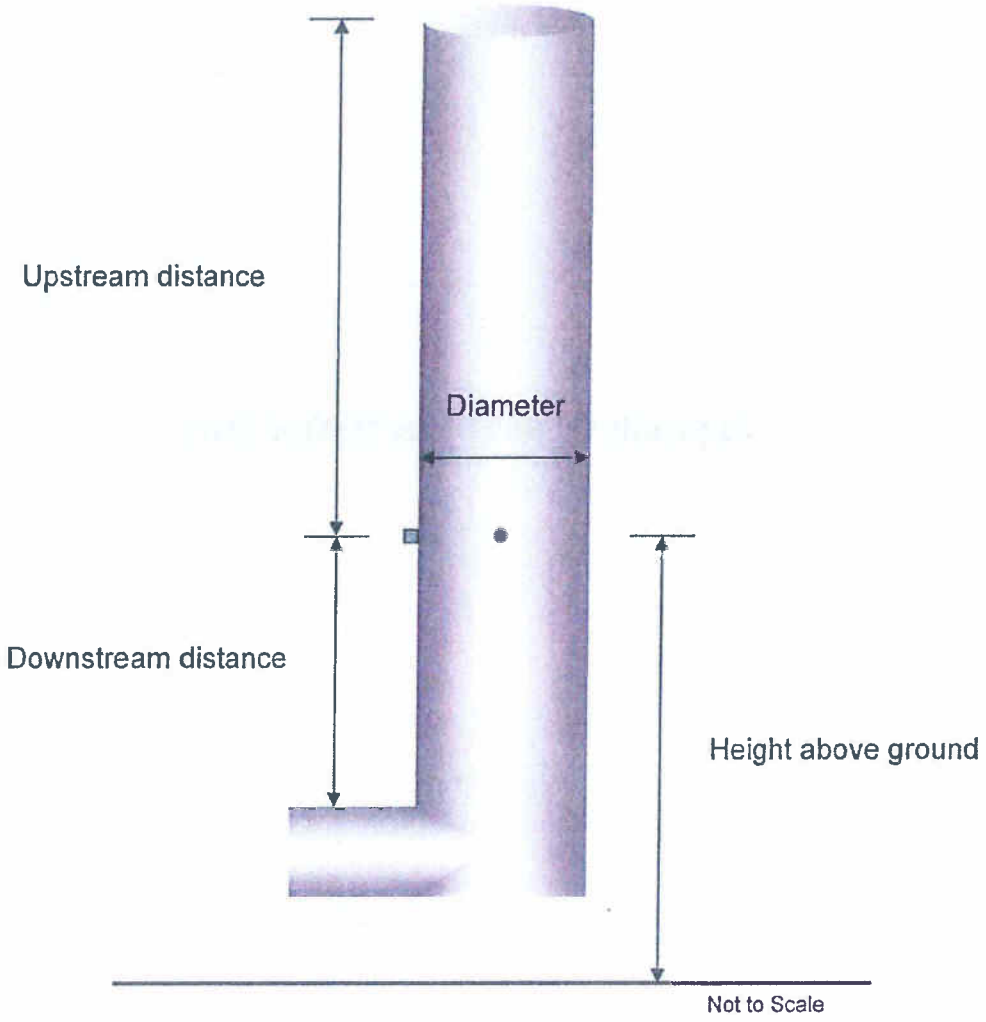
$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}}$$

11. Correction of Dry Gas Volume to Standard Conditions (Equation 5-1):

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460}$$

Appendix B. Location of Sampling Point

The location at which the samples were taken is approximately 22 feet above ground level. The sampling probes were inserted into the 12-inch diameter exhaust duct more than 48 inches from the stack exhaust and extending approximately 6 inches into the exhaust duct. A diagram of the sampling location is included below.



Upstream Distance: >48 inches
Upstream Diameters: >4.0
Downstream Distance: >60 inches
Downstream Diameters: >5.0

Appendix C. Reference Method Data

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Oxides of Nitrogen
Concentration

Run Number	Measured (ppm)	Adjusted (ppm*)
1	9.44	9.54
2	8.07	8.17
3	9.73	9.81

*Calculated according to equation 7E-5.

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Analyzer Calibration Error Data
Oxides of Nitrogen

10/5/2010
Runs 1-3
Span = 75.16 ppm

Gas Level	Certified Cylinder Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Calibration Error (%*)
Zero	0.00	0.21	0.21	0.28
Mid	37.58	37.88	0.30	0.40
High	75.16	75.55	0.39	0.52

* Percent of span

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
System Calibration Bias and Drift Data
Oxides of Nitrogen
Span = 75.16 ppm

	NO_x Calibration					NO_x Zero						
Run Number	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response NO_x Value (ppm)	Analyzer Response Zero Value (ppm)
1	37.55	0.44	36.43	1.93	1.49	0.05	0 21	0.09	0 16	0.05	37.88	0.21
2	36.43	1 93	37.33	0.73	1 20	0.09	0.16	0.05	0.21	0.05	37.88	0 21
3	37 33	0 73	36 79	1.45	0 72	0.05	0.21	0.10	0.15	0.07	37.88	0.21

* Percent of Span

NO2 to NO Conversion Efficiency Test
40CFR60, App. A, Method 7E, Section 8.2.4.1

$$Eff_{NOx} = \frac{C_{Dir}}{C_V} \times 100 \quad \text{(Eq. 7E-7)}$$

$$Eff_{NOx} = \frac{46.41}{49.94} \times 100$$

$$= \mathbf{92.93\ \%}$$

* minimum accepted value is 90%

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Carbon Monoxide
Concentration

Run Number	Measured (ppm)	Adjusted (ppm*)
1	143.61	137.66
2	128.38	120.66
3	140.28	132.71

*Calculated according to equation 7E-5.

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Analyzer Calibration Error Data
Carbon Monoxide

10/5/2010
Runs 1 - 3
Span = 389.04 ppm

Gas Range	Certified Cylinder Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Calibration Error (%*)
Zero	0.00	-0.23	0.23	0.06
Mid	194.52	189.06	5.46	1.40
High	389.04	384.41	4.63	1.19

* Percent of span

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
System Calibration Bias and Drift Data
Carbon Monoxide
Span = 389.04 ppm

Run Number	CO Calibration Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	CO Zero Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response CO Value (ppm)	Analyzer Response Zero Value (ppm)
1	196.81	1.99	202.60	3.48	1.49	5.27	1.41	10.32	2.71	1.30	189.06	-0.23
2	202.60	3.48	199.68	2.73	0.75	10.32	2.71	8.69	2.29	0.42	189.06	-0.23
3	199.68	2.73	202.67	3.50	0.77	8.69	2.29	10.35	2.72	0.43	189.06	-0.23

* PERCENT OF SPAN

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Oxygen
Concentration

Run Number	Measured (%)	Adjusted (%*)
1	-0.10	0.00
2	-0.09	0.00
3	-0.09	0.00

*Calculated according to equation 7E-5.

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Analyzer Calibration Data
Oxygen

10/5/2010
Runs 1-3
Span = 20.98 %

Gas Range	Actual Calibration Value (%)	Analyzer Calibration Response (%)	Absolute Difference (%)	Difference (%*)
Zero	0.00	-0.02	0.02	0.10
Mid	9.98	9.88	0.10	0.46
High	20.98	20.93	0.05	0.24

* Percent of span

Texas Midstream Gas Services
Ponder Compressor Station
Denton County, Texas
MC2209
System Calibration Bias and Drift Data
Oxygen
Span = 20.98 percent

	O_2 Calibration					O_2 Zero					Analyzer	Analyzer
Run Number	Initial Response (%)	Initial Bias (%*)	Final Response (%)	Final Bias (%*)	Drift (%*)	Initial Response (%)	Initial Bias (%*)	Final Response (%)	Final Bias (%*)	Drift (%*)	Response O_2 Value (%)	Response Zero Value (%)
1	9.63	1.19	9.66	1.05	0.14	-0.05	0.14	-0.01	0.05	0.19	9.88	-0.02
2	9.66	1.05	9.66	1.05	0.00	-0.01	0.05	0.00	0.10	0.05	9.88	-0.02
3	9.66	1.05	9.64	1.14	0.10	0.00	0.10	0.00	0.10	0.00	9.88	-0.02

Texas Midstream Gas Services
Ponder Compressor Station
MC2209
C-17694/1
Total Hydrocarbons
Concentration

Run Number	THC (ppm*)	Methane (ppm*)	NMHC (ppm*)
1	56.71	56.81	0.00
2	36.01	36.29	0.00
3	34.78	34.12	0.00

*as propane; NMC results calculated using Eq. 1065.660-2

Texas Midstream Gas Services
Ponder Compressor Station
Denton County, Texas
MC2209
Analyzer Calibration Data
Total Hydrocarbons

10/5/2010
Runs 1-3
Span = 1000.00 ppm

Gas Range	Actual Calibration Value (ppm)	Analyzer Calibration Response (ppm)	Absolute Difference (ppm)	Difference (%*)
Zero	0.00	1.32	1.32	0.13
Low	303.10	312.84	9.74	3.21
Mid	477.20	485.76	8.56	1.79
High	831.00	839.36	8.36	1.01

* Percent of actual value

Texas Midstream Gas Services
Ponder Compressor Station
Denton County, Texas
MC2209
System Calibration Bias and Drift Data
Total Hydrocarbons
Span = 1000.00 ppm

	THC Calibration					THC Zero						
Run Number	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Initial Response (ppm)	Initial Bias (%*)	Final Response (ppm)	Final Bias (%*)	Drift (%*)	Analyzer Response THC Value (ppm)	Analyzer Response Zero Value (ppm)
1	485.76	0.00	468.97	1.68	1.68	1.32	0.00	0.26	0.11	0.11	485.76	1.32
2	468.97	1.68	455.73	3.00	1.32	0.26	0.11	0.24	0.11	0.00	485.76	1.32
3	455.73	3.00	467.28	1.85	1.16	0.24	0.11	1.30	0.00	0.11	485.76	1.32

MidCon COMPRESSION

Method 205 - Calibration Dilution
Quailty Assurance Check

Date:	10/05/10	Field Supervisor:	Mr. Steve Bornsen
Make:	Horiba	Calibration Date:	07/26/10
Model:	SGD-710C	Next Calibration Due:	07/26/11
Serial Number:	D0099DN-072610	Analyzer Utilized:	CO

Gases Utilized During Check

	Cylinder Value	Cylinder Serial Number	Expiration Date
High-Level Supply Gas	972.60	SG9151612BAL	7/21/2012
Mid-Level Supply Gas	484.90	LL5852	7/21/2012

Linearity Check

	Predicted	Run 1		Run 2		Run 3		Average	
	Reading	Reading	Difference	Reading	Difference	Reading	Difference	Reading	Difference
80%	778.08	776.69	-0.18%	777.31	-0.10%	777.31	-0.10%	777.10	**-0.13%**
40%	389.04	385.03	-1.03%	387.44	-0.41%	387.27	-0.45%	386.58	**-0.63%**
Mid-Level Supply Gas	484.90	483.82	-0.22%	485.09	0.04%	485.42	0.11%	484.78	**-0.03%**

filename	10/5/2010	4:54:17 e LLC\RATAmation\CONFIG\MC2209 csv											
testby1	Mid Con Compression												
testby2	Steven Bornsen												
testby3	MCEL3												
testby4													
testfor1	Chesapeake Operating Inc												
testfor2	MC2209												
testfor3	Ponder CS												
testfor4													
name			O2	CO	NOx	THC	CH4						
sn			W05004-M	W05004-M	W05006	W05005	W05005						
offset			0.00	0.00	0.00	0.00	0.00						
fullscale			25.00	2000.00	200 00	1000 00	1000.00						
train			1.00	1.00	1 00	1.00	1 00						
gastype			o2 3a	co 10	nox 7e	thc 25a	thc 25a						
dcg1	10/5/2010	4:54.30	7.92	43 75	7.70	-0.21	-0.13	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	4:54:45	-0 01	0.62	9.78	-0 23	-0.16	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	4:55:00	-0.01	-0.29	0 55	-0 20	-0.18	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	4:55:15	-0.02	-0.98	0.37	-0.21	-0 15	ALM061181/cg1	N2	0		0	
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o2ezero1	10/5/2010	4:55 30	-0.02	-1.56	0.22	-0 21	-0 15	ALM061181/cg1	N2	0		0	
coezero1	10/5/2010	4 55 30	-0.02	-1.56	0.22	-0.21	-0.15	ALM061181/cg1	N2	0		0	
noxezero1	10/5/2010	4 55 30	-0.02	-1.56	0 22	-0.21	-0.15	ALM061181/cg1	N2	0		0	
dcg2	10/5/2010	4 56:00	16.91	-2.06	0.21	-0.18	-0 13	CC274805/cg2	O2	20 98		0	
dcg2	10/5/2010	4:56:15	20 86	-3.26	0.14	-0.13	-0.07	CC274805/cg2	O2	20.98		0	
dcg2	10/5/2010	4 56:30	20.91	-3 42	0 00	-0.11	-0 07	CC274805/cg2	O2	20 98		0	
dcg2	10/5/2010	4 56 45	20.93	-4 00	0.00	-0 13	-0.08	CC274805/cg2	O2	20.98		0	
o2high1	10/5/2010	4:56 45	20 93	-4.00	0.00	-0 13	-0 08	CC274805/cg2	O2	20.98		0	
thcezero1	10/5/2010	4:56 45	20 93	-4.00	0.00	-0.13	-0 08	CC274805/cg2	O2	20.98		0	
dcg3	10/5/2010	4 57 00	20 91	-4 04	0.00	-0 15	-0 05	CC67301/cg3	O2	9 976		0	
dcg3	10/5/2010	4 57 15	12.75	-4.04	0 10	-0 16	-0 03	CC67301/cg3	O2	9.976		0	
dcg3	10/5/2010	4:57,30	9 95	-4.40	0 03	-0 08	-0.02	CC67301/cg3	O2	9 976		0	
dcg3	10/5/2010	4 57 45	9 90	-4 75	0 05	-0 11	-0 02	CC67301/cg3	O2	9 976		0	
dcg3	10/5/2010	4 58 00	9.90	-4 00	0 00	-0 05	-0 02	CC67301/cg3	O2	9.976		0	
dcg3	10/5/2010	4 58 15	9.88	-2 67	0 00	-0.07	-0 05	CC67301/cg3	O2	9.976		0	
o2mid1	10/5/2010	4 58 15	9 88	-2 67	0.00	-0 07	-0 05	CC67301/cg3	O2	9.976		0	
ddg5	10/5/2010	4 58:45	14.94	118.69	0.16	-0.07	0 00	SG9151612BAL/dg3	NOx	150.32	CO	778 08	
ddg5	10/5/2010	4:59:00	0 21	1003.32	88.99	-0.07	-0 03	SG9151612BAL/dg3	NOx	150.32	CO	778 08	
ddg5	10/5/2010	4 59:15	0.10	773.47	148 62	-0.02	-0.02	SG9151612BAL/dg3	NOx	150.32	CO	778 08	
ddg5	10/5/2010	4:59:30	0.07	776 56	149 17	-0.08	-0.02	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg5	10/5/2010	4.59:45	0 05	776.89	149.35	-0.07	-0.02	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg5	10/5/2010	5 00 00	0.03	776.04	149.48	-0.02	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg3	10/5/2010	5 00 30	3.47	573.34	137.91	-0.02	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04	
ddg3	10/5/2010	5 00:45	0 02	383.27	87.36	-0.02	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04	
ddg3	10/5/2010	5 01:00	0 01	380 73	74.67	-0.02	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04	
cohigh1	10/5/2010	5 01 00	0 01	380 73	74.67	-0 02	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389.04	
noxhigh1	10/5/2010	5.01 00	0 01	380 73	74 67	-0.02	0 00	SG9151612BAL/dg3	NOx	75.16	CO	389.04	
dcg1	10/5/2010	5:01 30	5 81	77 73	51 39	0 00	0 00	ALM061181/cg1	N2	0		0	
o2ezero1	10/5/2010	5:01 30	5 81	77 73	51 39	0 00	0 00	ALM061181/cg1	N2	0		0	
coezero1	10/5/2010	5 01 30	5 81	77 73	51 39	0 00	0.00	ALM061181/cg1	N2	0		0	
noxezero1	10/5/2010	5 01.30	5.81	77 73	51 39	0.00	0 00	ALM061181/cg1	N2	0		0	
ddg3	10/5/2010	5 02 00	8.85	251 43	4.88	0 00	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389.04	
ddg3	10/5/2010	5 02 15	0 01	768 36	114 11	0 00	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389 04	
ddg3	10/5/2010	5:02 30	0.00	778 58	146 46	0 00	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389 04	
cohigh1	10/5/2010	5 02 30	0 00	778 58	146.46	0.00	0.00	SG9151612BAL/dg3	NOx	75 16	CO	389.04	
noxhigh1	10/5/2010	5:02 30	0 00	778.58	146 46	0 00	0.00	SG9151612BAL/dg3	NOx	75 16	CO	389 04	
dcg1	10/5/2010	5:03 00	6.61	211.00	112.80	0.00	0 00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5:03 15	0 00	-1.76	9.81	0.00	0.00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5:03 30	-0 01	-0.55	0 80	0.00	0.00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5:03 45	-0.01	-0.49	0 51	0 00	0.00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5 04 00	-0.02	-0.29	0.37	0.00	0 00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5 04 15	-0 02	-0 49	0 27	0 00	0.00	ALM061181/cg1	N2	0		0	
dcg1	10/5/2010	5 04:30	-0 02	-0 23	0 21	0 00	0 00	ALM061181/cg1	N2	0		0	
o2ezero1	10/5/2010	5.04 30	-0.02	-0.23	0.21	0 00	0.00	ALM061181/cg1	N2	0		0	
coezero1	10/5/2010	5:04:30	-0.02	-0.23	0 21	0 00	0.00	ALM061181/cg1	N2	0		0	
noxezero1	10/5/2010	5 04:30	-0 02	-0 23	0 21	0.00	0.00	ALM061181/cg1	N2	0		0	
ddg5	10/5/2010	5.04:45	0 83	-0.20	0 20	0 00	0 00	SG9151612BAL/dg3	NOx	150 32	CO	778.08	
ddg5	10/5/2010	5 05 00	6 60	376 92	16 45	0 00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778 08	
ddg5	10/5/2010	5.05:15	0 00	778 81	137 20	0 00	0 00	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg5	10/5/2010	5 05 30	-0.01	778.55	148 67	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg5	10/5/2010	5 05.45	-0 01	779.30	150 13	0.00	0 00	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg5	10/5/2010	5 06.00	-0.01	779.53	150 54	0 00	0 00	SG9151612BAL/dg3	NOx	150.32	CO	778.08	
ddg3	10/5/2010	5:06 15	0 24	726 34	149 52	0 00	0.00	SG9151612BAL/dg3	NOx	75 16	CO	389 04	
ddg3	10/5/2010	5:06:30	5 05	303 78	87.84	0.00	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389.04	
ddg3	10/5/2010	5 06 45	0.00	384 15	73 67	0 00	0 00	SG9151612BAL/dg3	NOx	75.16	CO	389 04	
ddg3	10/5/2010	5:07:00	-0.01	384.41	75 51	0 00	0.00	SG9151612BAL/dg3	NOx	75 16	CO	389.04	
ddg3	10/5/2010	5.07:15	-0 01	384.41	75 55	0 00	0 00	SG9151612BAL/dg3	NOx	75.16	CO	389 04	
cohigh1	10/5/2010	5:07.15	-0.01	384.41	75.55	0 00	0 00	SG9151612BAL/dg3	NOx	75 16	CO	389 04	
noxhigh1	10/5/2010	5:07:15	-0.01	384 41	75 55	0 00	0 00	SG9151612BAL/dg3	NOx	75.16	CO	389.04	
ddg6	10/5/2010	5:07.30	0.59	381 64	75.55	0.00	0 00	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
ddg6	10/5/2010	5:07 45	4.43	214.68	59.09	0.00	0.00	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
ddg6	10/5/2010	5:08 00	-0 01	189 88	39.90	0.00	0 00	SG9151612BAL/dg6	NOx	37 58	CO	194.52	
ddg6	10/5/2010	5 08:15	-0.01	189.88	37.98	0.00	0.00	SG9151612BAL/dg6	NOx	37 58	CO	194.52	
ddg6	10/5/2010	5:08:30	-0.01	190 07	37 93	0 00	0.00	SG9151612BAL/dg6	NOx	37 58	CO	194.52	
ddg6	10/5/2010	5:08.45	-0 01	189.23	37 89	0.00	0.00	SG9151612BAL/dg6	NOx	37 58	CO	194.52	

ddg8	10/5/2010	5:09:00	-0.02	189.06	37.88	0.00	0.00	SG9151612BAL/dg6	NOx	37.58	CO	194.62
comid1	10/5/2010	5:09:00	-0.02	189.06	37.88	0.00	0.00	SG9151612BAL/dg6	NOx	37.58	CO	194.52
noxmid1	10/5/2010	5:09:00	-0.02	189.06	37.88	0.00	0.00	SG9151612BAL/dg6	NOx	37.58	CO	194.52
dcg8	10/5/2010	5:09:30	13.95	141.99	18.12	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:09:45	0.16	499.71	33.81	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:10:00	0.06	503.81	60.66	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:10:15	0.03	505.18	66.31	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
ddg5	10/5/2010	5:11:30	12.78	124.48	2.73	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:11:45	0.05	742.64	104.44	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:12:00	0.01	773.63	148.83	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:12:15	0.00	777.44	149.39	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg3	10/5/2010	5:12:45	9.62	400.52	112.21	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:13:00	0.02	395.31	80.82	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:13:15	-0.01	385.29	75.25	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
cohigh1	10/5/2010	5:13:15	-0.01	385.29	75.25	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
noxhigh1	10/5/2010	5:13:15	-0.01	385.29	75.25	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
dcg8	10/5/2010	5:13:30	0.63	382.32	75.17	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:13:45	3.48	418.16	55.04	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:14:00	0.00	513.80	63.46	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:14:15	-0.01	514.29	74.51	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:14:30	-0.01	514.52	83.04	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:14:45	-0.02	514.19	88.04	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:15:00	-0.02	514.13	90.46	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:15:15	-0.02	514.32	91.27	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:15:30	-0.02	514.75	91.57	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:15:45	-0.02	514.49	91.70	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
ddg5	10/5/2010	5:16:00	6.58	381.15	90.63	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:16:15	0.62	436.72	53.33	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:16:30	0.00	24.41	64.67	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:16:45	-0.01	6.64	1.93	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:17:00	-0.02	1.30	0.77	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:17:15	-0.02	427.93	6.47	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:17:30	-0.01	822.27	128.82	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:17:45	-0.01	825.20	156.45	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:18:00	-0.01	805.47	155.40	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:18:15	-0.01	776.86	149.88	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:18:30	-0.01	776.86	150.24	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:18:45	-0.01	776.69	150.25	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg3	10/5/2010	5:19:00	5.12	615.07	147.87	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:19:15	0.12	451.86	96.18	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:19:30	-0.01	386.88	78.61	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:19:45	-0.01	386.20	76.30	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:20:00	-0.01	385.32	76.08	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:20:15	-0.01	384.96	76.00	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:20:30	-0.01	385.03	75.98	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
cohigh1	10/5/2010	5:20:30	-0.01	385.03	75.98	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
noxhigh1	10/5/2010	5:20:30	-0.01	385.03	75.98	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
dcg8	10/5/2010	5:20:45	-0.01	384.83	75.95	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:21:00	3.22	395.93	69.41	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:21:15	0.00	482.98	84.04	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:21:30	-0.01	483.72	87.60	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:21:45	-0.01	483.82	87.65	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
ddg5	10/5/2010	5:22:15	3.38	579.04	80.74	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:22:30	0.00	775.88	135.22	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:22:45	-0.01	777.31	150.26	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg3	10/5/2010	5:23:15	2.91	537.01	136.02	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:23:30	0.00	388.48	88.00	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:23:45	-0.01	387.44	76.52	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
cohigh1	10/5/2010	5:23:45	-0.01	387.44	76.52	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
noxhigh1	10/5/2010	5:23:45	-0.01	387.44	76.52	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
dcg8	10/5/2010	5:24:00	2.28	359.28	76.20	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:24:15	0.09	480.24	72.99	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:24:30	-0.01	484.86	87.87	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:24:45	-0.01	485.09	87.92	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
ddg5	10/5/2010	5:25:00	1.67	450.68	87.88	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:25:15	0.23	656.35	83.15	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:25:30	-0.01	775.72	144.68	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:25:45	-0.01	776.82	150.46	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg5	10/5/2010	5:26:00	-0.01	777.31	150.71	0.00	0.00	SG9151612BAL/dg3	NOx	150.32	CO	778.08
ddg3	10/5/2010	5:26:30	2.72	498.21	138.01	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:26:45	0.00	387.53	76.55	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
ddg3	10/5/2010	5:27:00	-0.01	387.27	76.61	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
cohigh1	10/5/2010	5:27:00	-0.01	387.27	76.61	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
noxhigh1	10/5/2010	5:27:00	-0.01	387.27	76.61	0.00	0.00	SG9151612BAL/dg3	NOx	75.16	CO	389.04
dcg8	10/5/2010	5:27:15	0.18	386.88	76.52	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:27:30	2.64	411.59	69.22	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:27:45	0.00	485.16	85.66	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:28:00	-0.01	485.35	88.13	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:28:15	-0.01	485.42	88.14	0.00	0.00	LL5852/cg8	NOx	93.04	CO	484.9
dcg8	10/5/2010	5:30:00	18.48	38.22	0.54	0.00	0.00	LL87086/cg8	NOx	49.91		
dcg8	10/5/2010	5:30:15	18.62	68.00	35.83	0.00	0.00	LL87086/cg8	NOx	49.91		
dcg8	10/5/2010	5:30:30	20.45	3.32	44.69	0.00	0.00	LL87086/cg8	NOx	49.91		
dcg8	10/5/2010	5:30:45	20.51	0.49	45.58	0.00	0.00	LL87086/cg8	NOx	49.91		
dcg8	10/5/2010	5:31:00	20.53	-0.33	46.04	0.00	0.00	LL87086/cg8	NOx	49.91		
dcg8	10/5/2010	5:31:15	20.55	-0.55	46.36	0.00	0.00	LL87086/cg8	NOx	49.91		

dcg8	10/5/2010	5:31:30	20.55	-0.94	46.55	0.00	0.00	LL87086/cg8	NOx	49.91	
dcg8	10/5/2010	5:31:45	20.56	-0.93	46.58	0.00	0.00	LL87086/cg8	NOx	49.91	
dcg8	10/5/2010	5:32:00	20.56	-1.01	46.52	0.00	0.00	LL87086/cg8	NOx	49.91	
dcg8	10/5/2010	5:32:15	20.56	-1.56	46.41	0.00	0.00	LL87086/cg8	NOx	49.91	
dcg8	10/5/2010	5:32:30	20.57	-1.95	46.39	0.00	0.00	LL87086/cg8	NOx	49.91	
dcg2	10/5/2010	5:33:00	20.62	-1.20	7.78	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:33:15	20.24	29.43	1.12	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:33:30	20.67	4.75	1.30	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:33:45	20.71	-3.19	0.64	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:34:00	20.72	-3.84	0.55	0.00	0.00	CC274805/cg2	O2	20.98	0
o2high1	10/5/2010	5:34:00	20.72	-3.84	0.55	0.00	0.00	CC274805/cg2	O2	20.98	0
thcezero1	10/5/2010	5:34:00	20.72	-3.84	0.55	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg5	10/5/2010	5:34:15	20.71	-3.55	0.52	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:34:30	20.70	-3.22	0.44	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:34:45	6.47	-4.13	0.44	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:35:00	0.19	-4.95	0.39	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:35:15	0.11	-4.56	0.39	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:35:30	0.07	-4.40	0.35	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:35:45	0.05	-4.56	0.34	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:36:00	0.03	-4.59	0.34	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:36:15	0.02	-4.43	0.29	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:36:30	0.01	-4.56	0.24	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:36:45	0.00	-4.88	0.24	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:37:00	0.00	-4.43	0.24	0.00	0.00	CC81292/cg5	THC	477.2	0
thcmid1	10/5/2010	5:37:00	0.00	-4.43	0.24	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg2	10/5/2010	5:37:15	0.00	-4.43	0.24	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:37:30	5.08	-4.36	0.24	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:37:45	18.35	-3.35	0.24	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:38:00	20.54	-3.03	0.24	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:38:15	20.58	-3.06	0.20	0.00	0.00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:38:30	20.60	-2.93	0.20	0.00	0.07	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:38:45	20.60	-2.93	0.20	0.00	0.26	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	5:39:00	20.61	-3.00	0.20	1.55	0.29	CC274805/cg2	O2	20.98	0
o2high1	10/5/2010	5:39:00	20.61	-3.00	0.20	1.55	0.29	CC274805/cg2	O2	20.98	0
thcezero1	10/5/2010	5:38:45	20.60	-2.93	0.20	0.00	0.26	CC274805/cg2	O2	20.98	0
dcg6	10/5/2010	5:39:15	20.60	-3.22	0.20	1.71	0.94	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:39:30	20.55	-3.22	0.20	7.18	1.45	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:39:45	4.22	-4.49	0.19	23.62	1.45	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:40:00	0.14	-5.11	0.10	23.65	3.50	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:40:15	0.07	-4.56	0.10	498.01	3.66	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:40:30	0.04	-5.08	0.10	853.52	3.60	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:40:45	0.02	-5.14	0.10	853.52	3.42	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:41:00	0.01	-5.14	0.10	847.05	3.42	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:41:15	0.00	-5.27	0.10	846.44	3.71	LL45443/cg6	THC	831	0
dcg6	10/5/2010	5:41:30	-0.01	-5.24	0.10	866.11	3.91	LL45443/cg6	THC	831	0
thchigh1	10/5/2010	5:41:15	0.00	-5.27	0.10	846.44	3.71	LL45443/cg6	THC	831	0
dcg5	10/5/2010	5:41:45	-0.02	-5.37	0.10	923.10	3.92	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:42:00	4.79	-4.75	0.10	923.10	3.91	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:42:15	0.18	-4.36	0.10	709.52	3.92	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:42:30	2.71	-4.07	0.10	552.98	3.42	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:42:45	19.94	-2.38	0.10	552.98	1.95	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:43:00	17.89	-2.25	0.10	45.72	1.95	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:43:15	0.32	-3.81	0.10	1.27	3.50	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:43:30	0.02	-3.87	0.10	125.81	4.64	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:43:45	-0.01	-2.08	0.10	516.15	4.64	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:44:00	-0.02	-2.93	0.05	516.20	3.52	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:44:15	-0.02	-2.93	0.10	575.85	3.42	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	5:44:30	-0.03	-3.09	0.10	618.16	3.42	CC81292/cg5	THC	477.2	0
thcmid1	10/5/2010	5:44:00	-0.02	-2.93	0.05	516.20	3.52	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:51:30	20.44	-11.07	0.10	0.08	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:51:45	18.00	-4.98	0.10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:52:00	0.48	-6.87	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:52:15	0.07	-10.97	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:52:30	0.06	-0.07	0.08	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:52:45	0.04	-0.03	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:53:00	0.00	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:53:15	-0.02	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:53:30	-0.03	-0.03	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:53:45	-0.03	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:54:00	-0.04	-0.07	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:54:15	-0.04	-0.10	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:54:30	-0.04	0.00	0.08	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:54:45	-0.05	0.00	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:55:00	-0.05	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:55:15	-0.05	0.00	0.08	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:55:30	-0.05	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:55:45	-0.05	0.36	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:56:00	-0.05	0.72	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:56:15	-0.05	0.72	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:56:30	-0.06	0.55	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:56:45	-0.06	0.72	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:57:00	-0.06	0.81	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:57:15	-0.06	0.42	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:57:30	-0.06	0.07	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:57:45	-0.06	0.33	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0

dcg5	10/5/2010	6:58:00	-0.06	0.68	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6 58:15	-0.06	0.59	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6 58:30	-0.06	0.72	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6 58:45	-0.06	0 94	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:59 00	-0.06	0.98	0 07	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:59 15	-0 06	0.88	0 07	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6:59 30	-0.06	0.68	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	6 59 45	-0 06	0.46	0 05	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 00 00	-0.06	0.85	0 05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:00 15	-0 06	0.75	0.05	0.00	0.00	CC81292/cg5	THC	477 2	0
dcg6	10/5/2010	7 00:30	-0 06	0.42	0.06	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 00:45	-0.06	0.03	0 05	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:01 00	-0.06	0 52	0.07	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 01 15	-0.06	0 65	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 01 30	-0 06	0 39	0.06	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:01:45	-0.06	0,26	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:02 00	-0 06	0 10	0.07	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 02 15	-0 06	0 23	0.07	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 02 30	-0 06	0 07	0 08	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 02 45	-0 06	0 03	0.05	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:03 00	-0 06	0 00	0 05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 03 15	-0 06	0 23	0 05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 03 30	-0 06	0.20	0 05	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 03 45	-0 07	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 04,00	-0 07	0.00	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 04 15	-0.06	0 10	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:04 30	-0.07	0 72	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:04 45	-0.07	0 03	0.05	0.00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:05.00	-0 07	0.10	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:05 15	-0.07	0 23	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:05 30	-0 06	0.72	0.05	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 05 45	-0 06	0.49	0.06	0.00	0.00	CC81292/cg5	THC	477 2	0
dcg5	10/5/2010	7 06 00	-0 07	0.59	0.08	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7.06.15	-0 07	0.42	0.09	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7.06.30	-0 07	0 85	0.06	0.00	0.00	CC81292/cg5	THC	477.2	0
thcmid1	10/5/2010	7.06 30	-0 07	0.65	0 06	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:14 00	-0 08	124 54	4.23	0 00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:14 15	0 06	70 51	12 82	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7.14 30	-0.03	-0 65	2 12	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:14 45	-0 05	-1.24	0 20	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 15 00	-0 05	-0 68	0 10	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 15 15	-0 06	-0 23	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
thcmid1	10/5/2010	7 15 15	-0 06	-0 23	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg2	10/5/2010	7:15:45	-0 06	0 26	0 10	0.00	0 00	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7 16:00	7.08	0.91	0 10	0 00	0 00	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7.16.15	20.31	2 25	0.10	0.00	0.00	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7.16:30	20 45	2 25	0 10	0 00	0 11	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7:16:45	20 49	2.44	0 10	0 00	1.20	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7:17:00	20.51	2.47	0.10	0 37	1.22	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7.17:15	20 52	2 47	0.10	0.49	0.88	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7 17 30	20.53	2.67	0 10	0.47	0 49	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7.17 45	20.54	2.93	0.10	0.49	0 49	CC274805/cg2	O2	20.98	0
o2high1	10/5/2010	7.17 45	20 54	2 93	0.10	0 49	0 49	CC274805/cg2	O2	20 98	0
thcezero1	10/5/2010	7:17.30	20 53	2 67	0 10	0.47	0 49	CC274805/cg2	O2	20 98	0
dcg5	10/5/2010	7 18 00	20 55	2 93	0 10	0.49	0 10	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 18:15	20 15	2.93	0,09	0.46	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 18 30	1 71	1 73	0 08	0 49	0 21	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 18 45	0.09	1 47	0 10	0.49	1,71	CC81292/cg5	THC	477 2	0
thcmid1	10/5/2010	7 18.45	0 09	1 47	0.10	0.49	1.71	CC81292/cg5	THC	477.2	0
dcg2	10/5/2010	7.24 45	-0.11	43 07	15.26	0.00	0 00	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7 25 00	0 87	132 23	7 17	0 00	0 00	CC274805/cg2	O2	20.98	0
o2high1	10/5/2010	7 25.00	0 87	132 23	7 17	0 00	0.00	CC274805/cg2	O2	20 98	0
thcezero1	10/5/2010	7:25 00	0 87	132.23	7.17	0 00	0 00	CC274805/cg2	O2	20 98	0
dcg5	10/5/2010	7 25 30	20.43	2 51	0.19	0 00	0 00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7.25.45	16.01	2.77	0.10	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7:26 00	0.26	2 31	0 10	0 00	0 00	CC81292/cg5	THC	477 2	0
dcg5	10/5/2010	7 26 15	0 03	2.51	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 26:30	-0.01	2.51	0 10	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 26 45	-0 03	2.44	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 27 00	-0 04	2.44	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 27 15	-0 04	2.21	0 10	0.00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 27 30	-0 05	2.15	0 10	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 27.45	-0 05	2.41	0 10	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7 28 00	-0 05	2.44	0 09	0 00	0.00	CC81292/cg5	THC	477.2	0
dcg5	10/5/2010	7.28:15	-0.06	2 47	0.07	0 00	0.00	CC81292/cg5	THC	477.2	0
thcmid1	10/5/2010	7.28:15	-0.06	2 47	0 07	0 00	0.00	CC81292/cg5	THC	477 2	0
dcg2	10/5/2010	7.28:30	-0.06	2 70	0 06	0.00	0.00	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7:28 45	-0 06	2 60	0 05	0.00	1 97	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7:29 00	15 17	3 52	0.05	0.39	3 73	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7.29 15	20.42	4 36	0.05	2.08	3.73	CC274805/cg2	O2	20 98	0
dcg2	10/5/2010	7.29.30	20 49	4 40	0.05	2.10	1.14	CC274805/cg2	O2	20.98	0
dcg2	10/5/2010	7.29 45	20 51	4 46	0.05	1.32	0.73	CC274805/cg2	O2	20.98	0
o2high1	10/5/2010	7.29.45	20.51	4 46	0.05	1.32	0.73	CC274805/cg2	O2	20.98	0
thcezero1	10/5/2010	7 29 45	20 51	4 46	0 05	1 32	0 73	CC274805/cg2	O2	20.98	0
dcg6	10/5/2010	7 30 00	20 54	4 46	0 05	0 73	0 60	LL45443/cg6	THC	831	0

dcg6	10/5/2010	7:30:15	20.54	4.40	0.05	0.73	0.00	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:30:30	8.67	3.68	0.05	93.91	0.00	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:30:45	0.20	2.90	0.05	109.62	1.61	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:31:00	0.04	2.93	0.05	244.19	3.06	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:31:15	0.01	2.87	0.05	808.55	3.13	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:31:30	-0.01	2.87	0.05	808.59	3.39	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:31:45	-0.02	2.87	0.05	824.63	3.42	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:32:00	-0.03	3.00	0.05	839.36	3.37	LL45443/cg6	THC	831		0
dcg6	10/5/2010	7:32:15	-0.04	3.19	0.05	839.36	3.09	LL45443/cg6	THC	831		0
thchigh1	10/5/2010	7:32:15	-0.04	3.19	0.05	839.36	3.09	LL45443/cg6	THC	831		0
dcg5	10/5/2010	7:32:30	-0.04	2.96	0.08	871.68	3.09	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:32:45	-0.04	3.19	0.06	676.99	3.06	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:33:00	-0.01	4.07	0.08	801.25	3.01	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:33:15	-0.04	4.40	0.05	467.29	3.04	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:33:30	-0.05	4.36	0.05	467.29	2.98	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:33:45	-0.05	4.40	0.05	456.72	3.03	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:34:00	-0.06	4.36	0.06	447.02	2.93	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:34:15	-0.06	4.36	0.05	447.02	2.69	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:34:30	-0.06	3.94	0.05	485.76	2.69	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:34:45	-0.05	4.00	0.05	492.43	2.69	CC81292/cg5	THC	477.2		0
dcg5	10/5/2010	7:35:00	-0.06	4.33	0.05	481.43	2.69	CC81292/cg5	THC	477.2		0
thcmid1	10/5/2010	7:34:30	-0.06	3.94	0.05	485.76	2.69	CC81292/cg5	THC	477.2		0
dcg4	10/5/2010	7:35:15	-0.06	4.40	0.05	433.59	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:35:30	0.09	4.23	0.05	433.59	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:35:45	0.17	4.40	0.05	390.64	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:36:00	-0.06	4.30	0.05	351.82	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:36:15	-0.06	4.46	0.05	351.81	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:36:30	-0.06	4.59	0.05	324.94	2.69	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:36:45	-0.06	4.66	0.05	320.31	2.85	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:37:00	-0.07	4.53	0.05	312.84	3.00	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:37:15	-0.06	4.43	0.05	281.25	3.00	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:37:30	-0.07	4.79	0.05	281.25	2.15	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:37:45	-0.07	4.59	0.05	283.89	2.00	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:38:00	-0.07	4.53	0.05	285.38	2.05	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:38:15	-0.07	4.46	0.05	286.38	2.44	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:38:30	-0.07	4.72	0.05	322.30	2.44	LL16832/cg4	THC	303.1		0
dcg4	10/5/2010	7:38:45	-0.07	4.85	0.05	328.37	2.44	LL16832/cg4	THC	303.1		0
thclow1	10/5/2010	7:37:00	-0.07	4.53	0.05	312.84	3.00	LL16832/cg4	THC	303.1		0
scg3	10/5/2010	7:39:15	-0.06	4.88	0.05	323.98	2.44	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	7:39:30	0.17	13.18	0.23	323.98	2.07	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	7:39:45	8.85	9.44	0.98	157.34	1.97	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	7:40:00	9.60	5.27	0.05	3.42	1.89	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	7:40:15	9.63	5.27	0.05	3.42	1.47	CC67301/cg3	O2	9.976		0
o2span1	10/5/2010	7:40:15	9.63	5.27	0.05	3.42	1.47	CC67301/cg3	O2	9.976		0
cozero1	10/5/2010	7:40:15	9.63	5.27	0.05	3.42	1.47	CC67301/cg3	O2	9.976		0
noxzero1	10/5/2010	7:40:15	9.63	5.27	0.05	3.42	1.47	CC67301/cg3	O2	9.976		0
sdg6	10/5/2010	7:40:45	9.65	5.34	0.05	1.71	1.09	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:41:00	7.34	58.92	2.25	2.26	0.73	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:41:15	0.10	612.83	85.75	4.67	0.73	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:41:30	0.00	771.68	145.08	4.66	2.20	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:41:45	-0.02	773.99	146.13	6.32	2.44	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:42:00	-0.03	457.98	114.24	7.81	2.44	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:42:15	-0.04	200.91	39.29	7.81	2.44	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:42:30	-0.04	198.05	37.70	7.81	2.44	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	7:42:45	-0.05	196.81	37.55	7.81	2.26	SG9151612BAL/dg6	NOx	37.58	CO	194.52
o2zero1	10/5/2010	7:42:45	-0.05	196.81	37.55	7.81	2.26	SG9151612BAL/dg6	NOx	37.58	CO	194.52
cospan1	10/5/2010	7:42:45	-0.05	196.81	37.55	7.81	2.26	SG9151612BAL/dg6	NOx	37.58	CO	194.52
noxspan1	10/5/2010	7:42:45	-0.05	196.81	37.55	7.81	2.26	SG9151612BAL/dg6	NOx	37.58	CO	194.52
run1	10/5/2010	7:54:15	-0.05	189.16	5.75	67.40	65.58					
run1	10/5/2010	7:54:30	-0.06	190.07	12.04	95.88	65.59					
run1	10/5/2010	7:54:45	-0.06	102.31	22.93	100.59	61.39					
run1	10/5/2010	7:55:00	-0.07	45.87	5.12	93.12	57.62					
run1	10/5/2010	7:55:15	-0.08	41.08	11.70	59.81	57.62					
run1	10/5/2010	7:55:30	-0.08	27.93	2.68	59.81	42.61					
run1	10/5/2010	7:55:45	-0.09	102.93	1.39	60.19	40.04					
run1	10/5/2010	7:56:00	-0.09	24.94	8.54	60.55	36.77					
run1	10/5/2010	7:56:15	-0.09	39.10	5.17	60.55	22.95					
run1	10/5/2010	7:56:30	-0.09	55.14	7.45	30.89	22.95					
run1	10/5/2010	7:56:45	-0.10	163.15	0.68	25.88	39.10					
run1	10/5/2010	7:57:00	-0.10	130.50	2.91	33.53	54.20					
run1	10/5/2010	7:57:15	-0.10	81.48	3.98	66.90	54.20					
run1	10/5/2010	7:57:30	-0.10	91.96	7.76	66.90	57.98					
run1	10/5/2010	7:57:45	-0.10	35.84	8.54	56.62	58.59					
run1	10/5/2010	7:58:00	-0.10	146.13	8.17	47.36	61.34					
run1	10/5/2010	7:58:15	-0.10	226.79	9.76	47.36	73.49					
run1	10/5/2010	7:58:30	-0.10	117.32	5.94	64.24	73.49					
run1	10/5/2010	7:58:45	-0.10	48.47	12.07	67.14	65.97					
run1	10/5/2010	7:59:00	-0.10	41.73	13.39	63.93	59.08					
run1	10/5/2010	7:59:15	-0.10	96.68	5.94	50.39	59.08					
run1	10/5/2010	7:59:30	-0.10	26.53	9.55	50.39	34.95					
run1	10/5/2010	7:59:45	-0.10	280.47	0.85	68.47	31.01					
run1	10/5/2010	8:00:00	-0.10	103.68	8.16	85.45	35.32					
run1	10/5/2010	8:00:15	-0.10	15.23	48.05	85.45	54.20					
run1	10/5/2010	8:00:30	-0.10	12.83	6.13	27.59	54.20					
run1	10/5/2010	8:00:45	-0.10	199.28	1.00	17.82	60.50					

run1	10/5/2010	8:01:00	-0.10	157.88	0.41	26.92	66.16
run1	10/5/2010	8:01:15	-0.10	53.39	2.67	65.19	66.16
run1	10/5/2010	8:01:30	-0.10	149.97	2.88	65.19	58.48
run1	10/5/2010	8:01:45	-0.10	86.69	5.92	66.59	57.13
run1	10/5/2010	8:02:00	-0.10	79.33	4.41	67.87	61.64
run1	10/5/2010	8:02:15	-0.10	485.12	8.70	67.87	80.81
run1	10/5/2010	8:02:30	-0.10	84.83	12.29	41.42	80.81
run1	10/5/2010	8:02:45	-0.10	70.83	19.08	37.11	58.42
run1	10/5/2010	8:03:00	-0.10	350.68	1.37	45.59	37.61
run1	10/5/2010	8:03:15	-0.10	115.82	6.76	82.76	37.61
run1	10/5/2010	8:03:30	-0.10	70.35	3.59	82.76	41.98
run1	10/5/2010	8:03:45	-0.10	83.95	5.55	68.65	42.73
run1	10/5/2010	8:04:00	-0.10	60.29	6.66	55.91	42.40
run1	10/5/2010	8:04:15	-0.10	20.25	7.99	55.91	41.02
run1	10/5/2010	8:04:30	-0.10	24.94	1.62	53.00	41.02
run1	10/5/2010	8:04:45	-0.10	118.13	2.61	52.49	59.02
run1	10/5/2010	8:05:00	-0.10	93.23	3.30	58.02	75.68
run1	10/5/2010	8:05:15	-0.10	29.75	16.11	71.29	75.68
run1	10/5/2010	8:05:30	-0.10	71.45	1.64	71.29	69.82
run1	10/5/2010	8:05:45	-0.10	47.49	5.92	62.27	68.85
run1	10/5/2010	8:06:00	-0.10	323.73	4.23	54.20	69.55
run1	10/5/2010	8:06:15	-0.10	148.50	8.92	54.20	72.54
run1	10/5/2010	8:06:30	-0.10	84.67	14.73	70.25	72.51
run1	10/5/2010	8:06:45	-0.10	77.18	9.46	73.00	72.59
run1	10/5/2010	8:07:00	-0.10	78.32	12.23	67.94	72.59
run1	10/5/2010	8:07:15	-0.10	66.24	1.71	46.65	72.54
run1	10/5/2010	8:07:30	-0.10	130.08	9.40	46.63	78.42
run1	10/5/2010	8:07:45	-0.10	18.52	11.72	39.42	79.35
run1	10/5/2010	8:08:00	-0.10	40.40	0.85	32.72	79.22
run1	10/5/2010	8:08:15	-0.10	63.57	2.94	32.72	78.61
run1	10/5/2010	8:08:30	-0.10	54.23	3.01	63.10	78.61
run1	10/5/2010	8:08:45	-0.10	162.14	5.05	68.12	77.20
run1	10/5/2010	8:09:00	-0.10	136.30	7.12	62.61	75.93
run1	10/5/2010	8:09:15	-0.10	65.56	4.95	41.29	75.93
run1	10/5/2010	8:09:30	-0.10	319.30	4.08	41.31	67.61
run1	10/5/2010	8:09:45	-0.10	226.27	11.59	60.79	66.16
run1	10/5/2010	8:10:00	-0.10	315.72	17.88	78.61	69.27
run1	10/5/2010	8:10:15	-0.10	268.85	18.28	78.61	82.41
run1	10/5/2010	8:10:30	-0.10	381.22	19.78	73.75	82.50
run1	10/5/2010	8:10:45	-0.10	285.78	20.01	73.00	74.27
run1	10/5/2010	8:11:00	-0.10	299.06	18.33	73.18	66.57
run1	10/5/2010	8:11:15	-0.10	233.76	26.78	73.98	66.55
run1	10/5/2010	8:11:30	-0.10	423.96	14.42	73.98	69.12
run1	10/5/2010	8:11:45	-0.10	78.45	33.56	65.14	69.58
run1	10/5/2010	8:12:00	-0.10	243.20	19.12	57.13	66.98
run1	10/5/2010	8:12:15	-0.10	133.43	17.08	57.13	56.40
run1	10/5/2010	8:12:30	-0.10	242.77	14.56	36.77	56.40
run1	10/5/2010	8:12:45	-0.10	198.21	10.41	33.20	54.87
run1	10/5/2010	8:13:00	-0.10	105.11	12.64	37.06	53.47
run1	10/5/2010	8:13:15	-0.10	108.01	7.45	53.47	53.47
run1	10/5/2010	8:13:30	-0.10	171.19	13.08	53.47	65.50
run1	10/5/2010	8:13:45	-0.10	27.08	9.58	49.66	67.45
run1	10/5/2010	8:14:00	-0.10	21.91	10.70	46.39	63.88
run1	10/5/2010	8:14:15	-0.10	73.99	1.32	46.39	48.10
run1	10/5/2010	8:14:30	-0.10	35.03	2.13	61.04	48.10
run1	10/5/2010	8:14:45	-0.10	46.88	3.46	62.26	57.99
run1	10/5/2010	8:15:00	-0.10	31.90	4.98	63.82	64.88
run1	10/5/2010	8:15:15	-0.10	43.98	1.06	68.12	64.86
run1	10/5/2010	8:15:30	-0.10	117.29	2.07	68.12	76.61
run1	10/5/2010	8:15:45	-0.10	52.51	8.32	59.31	77.39
run1	10/5/2010	8:16:00	-0.10	103.42	1.43	52.98	82.21
run1	10/5/2010	8:16:15	-0.10	80.60	6.34	53.00	96.19
run1	10/5/2010	8:16:30	-0.10	68.56	6.64	55.26	96.19
run1	10/5/2010	8:16:45	-0.10	397.82	3.90	55.42	85.65
run1	10/5/2010	8:17:00	-0.10	542.84	22.28	65.77	78.61
run1	10/5/2010	8:17:15	-0.10	329.46	24.68	93.75	78.61
run1	10/5/2010	8:17:30	-0.10	290.27	38.13	93.75	87.39
run1	10/5/2010	8:17:45	-0.10	36.98	8.36	74.98	88.14
run1	10/5/2010	8:18:00	-0.10	521.65	7.94	62.01	89.78
run1	10/5/2010	8:18:15	-0.10	919.63	18.76	61.98	94.48
run1	10/5/2010	8:18:30	-0.10	186.10	38.58	74.41	94.48
run1	10/5/2010	8:18:45	-0.10	154.53	19.28	75.20	82.41
run1	10/5/2010	8:19:00	-0.10	277.64	12.90	81.67	74.95
run1	10/5/2010	8:19:15	-0.10	356.28	20.10	100.59	74.95
run1	10/5/2010	8:19:30	-0.10	287.92	12.70	100.59	79.92
run1	10/5/2010	8:19:45	-0.10	455.76	20.86	105.52	80.32
run1	10/5/2010	8:20:00	-0.10	168.88	44.99	108.89	70.41
run1	10/5/2010	8:20:15	-0.10	320.48	7.57	108.89	44.68
run1	10/5/2010	8:20:30	-0.10	359.54	3.95	101.90	44.69
run1	10/5/2010	8:20:45	-0.10	59.93	13.75	101.32	54.49
run1	10/5/2010	8:21:00	-0.10	450.33	5.47	110.25	61.28
run1	10/5/2010	8:21:15	-0.10	163.90	29.16	135.97	61.28
run1	10/5/2010	8:21:30	-0.10	99.74	6.53	135.91	58.77
run1	10/5/2010	8:21:45	-0.10	67.03	5.37	101.42	58.59
run1	10/5/2010	8:22:00	-0.10	99.19	4.97	79.59	74.32

run1	10/5/2010	8:22:15	-0.10	89.91	9.65	79.59	121.09
run1	10/5/2010	8:22:30	-0.10	33.17	8.11	59.75	121.09
run1	10/5/2010	8:22:45	-0.10	36.91	9.23	58.11	72.10
run1	10/5/2010	8:23:00	-0.10	64.00	1.31	65.15	38.33
run1	10/5/2010	8:23:15	-0.10	186.26	0.87	83.98	38.33
run1	10/5/2010	8:23:30	-0.10	113.97	5.13	83.98	95.56
run1	10/5/2010	8:23:45	-0.10	91.86	5.95	92.48	99.12
run1	10/5/2010	8:24:00	-0.10	122.98	12.49	98.47	89.54
run1	10/5/2010	8:24:15	-0.10	133.33	19.37	98.41	62.01
run1	10/5/2010	8:24:30	-0.10	55.79	4.57	63.33	62.00
run1	10/5/2010	8:24:45	-0.10	137.92	4.98	60.55	68.83
run1	10/5/2010	8:25:00	-0.10	64.36	4.52	58.15	73.24
run1	10/5/2010	8:25:15	-0.10	45.44	9.88	51.03	73.24
run1	10/5/2010	8:25:30	-0.10	118.00	3.76	51.03	64.26
run1	10/5/2010	8:25:45	-0.10	52.51	17.00	63.17	63.48
run1	10/5/2010	8:26:00	-0.10	31.97	19.90	71.53	57.83
run1	10/5/2010	8:26:15	-0.10	97.14	0.57	71.53	41.75
run1	10/5/2010	8:26:30	-0.10	86.00	2.50	73.18	41.75
run1	10/5/2010	8:26:45	-0.10	87.92	2.54	73.24	57.66
run1	10/5/2010	8:27:00	-0.10	49.94	18.46	62.58	69.12
run1	10/5/2010	8:27:15	-0.10	74.51	3.92	31.49	69.09
run1	10/5/2010	8:27:30	-0.10	30.40	11.10	31.49	56.22
run1	10/5/2010	8:27:45	-0.10	44.79	3.58	35.61	55.18
run1	10/5/2010	8:28:00	-0.10	51.79	1.12	38.33	52.02
run1	10/5/2010	8:28:15	-0.10	76.17	1.80	38.33	44.04
run1	10/5/2010	8:28:30	-0.10	49.28	7.39	60.04	44.01
run1	10/5/2010	8:28:45	-0.10	45.54	2.12	61.91	41.63
run1	10/5/2010	8:29:00	-0.10	65.95	2.63	59.52	40.04
run1	10/5/2010	8:29:15	-0.10	51.53	4.92	52.49	40.04
run1	10/5/2010	8:29:30	-0.10	169.04	4.11	52.49	62.19
run1	10/5/2010	8:29:45	-0.10	289.97	7.45	70.17	63.82
run1	10/5/2010	8:30:00	-0.10	122.62	17.22	81.30	65.53
run1	10/5/2010	8:30:15	-0.10	63.22	9.86	81.30	70.56
run1	10/5/2010	8:30:30	-0.10	61.62	11.05	60.29	70.56
run1	10/5/2010	8:30:45	-0.10	150.20	3.88	58.59	78.79
run1	10/5/2010	8:31:00	-0.10	133.95	6.84	58.92	84.47
run1	10/5/2010	8:31:15	-0.10	105.99	7.90	59.81	84.47
run1	10/5/2010	8:31:30	-0.10	38.09	8.95	59.81	45.15
run1	10/5/2010	8:31:45	-0.10	60.16	2.45	57.80	41.75
run1	10/5/2010	8:32:00	-0.10	93.56	5.56	56.40	46.79
run1	10/5/2010	8:32:15	-0.10	211.88	3.82	56.40	61.28
run1	10/5/2010	8:32:30	-0.10	62.08	17.39	67.79	61.28
run1	10/5/2010	8:32:45	-0.10	105.53	3.21	68.60	64.91
run1	10/5/2010	8:33:00	-0.10	134.18	7.21	72.27	67.14
run1	10/5/2010	8:33:15	-0.10	188.57	10.49	83.01	67.14
run1	10/5/2010	8:33:30	-0.10	373.70	14.34	83.01	61.79
run1	10/5/2010	8:33:45	-0.10	188.22	21.55	56.80	83.01
run1	10/5/2010	8:34:00	-0.10	130.11	13.21	38.82	70.61
run1	10/5/2010	8:34:15	-0.10	489.94	11.51	38.82	36.62
run1	10/5/2010	8:34:30	-0.10	179.40	27.90	43.70	36.62
run1	10/5/2010	8:34:45	-0.10	194.53	10.91	43.95	39.39
run1	10/5/2010	8:35:00	-0.10	39.88	19.48	40.43	41.36
run1	10/5/2010	8:35:15	-0.10	35.58	3.40	30.27	41.34
run1	10/5/2010	8:35:30	-0.10	122.79	3.51	30.27	36.05
run1	10/5/2010	8:35:45	-0.10	229.43	6.81	42.89	35.65
run1	10/5/2010	8:36:00	-0.10	217.51	14.39	51.03	35.65
run1	10/5/2010	8:36:15	-0.10	30.47	6.72	51.03	35.65
run1	10/5/2010	8:36:30	-0.10	90.56	2.56	37.50	35.65
run1	10/5/2010	8:36:45	-0.10	250.46	4.18	36.38	45.31
run1	10/5/2010	8:37:00	-0.10	400.46	8.71	43.02	52.00
run1	10/5/2010	8:37:15	-0.10	529.40	17.67	61.28	52.00
run1	10/5/2010	8:37:30	-0.10	458.63	20.37	61.28	56.62
run1	10/5/2010	8:37:45	-0.10	228.29	24.50	52.30	56.89
run1	10/5/2010	8:38:00	-0.10	214.84	18.59	45.95	53.06
run1	10/5/2010	8:38:15	-0.10	152.57	9.52	45.92	41.99
run1	10/5/2010	8:38:30	-0.10	116.05	10.00	45.44	41.99
run1	10/5/2010	8:38:45	-0.10	235.97	11.95	45.41	44.94
run1	10/5/2010	8:39:00	-0.10	359.18	6.41	48.80	46.39
run1	10/5/2010	8:39:15	-0.10	215.98	8.63	55.18	46.32
run1	10/5/2010	8:39:30	-0.10	107.39	19.07	55.18	44.03
run1	10/5/2010	8:39:45	-0.10	148.86	8.20	46.05	43.95
run1	10/5/2010	8:40:00	-0.10	286.75	6.90	41.26	47.87
run1	10/5/2010	8:40:15	-0.10	204.23	26.27	41.05	55.91
run1	10/5/2010	8:40:30	-0.10	76.89	12.70	24.28	55.91
run1	10/5/2010	8:40:45	-0.10	74.51	3.96	24.17	39.03
run1	10/5/2010	8:41:00	-0.10	136.46	6.27	26.71	31.25
run1	10/5/2010	8:41:15	-0.10	48.37	12.87	31.98	31.25
run1	10/5/2010	8:41:30	-0.10	116.41	5.83	31.98	29.87
run1	10/5/2010	8:41:45	-0.10	143.03	7.64	36.15	29.83
run1	10/5/2010	8:42:00	-0.10	282.19	5.69	38.33	35.89
run1	10/5/2010	8:42:15	-0.10	104.40	14.64	38.30	47.36
run1	10/5/2010	8:42:30	-0.10	33.20	12.74	37.11	47.36
run1	10/5/2010	8:42:45	-0.10	50.52	2.63	37.11	43.39
run1	10/5/2010	8:43:00	-0.10	98.63	3.65	39.81	41.28
run1	10/5/2010	8:43:15	-0.10	36.26	7.69	45.41	41.21

run1	10/5/2010	8:43:30	-0.10	65.14	1.37	45.41	31.06						
run1	10/5/2010	8:43:45	-0.10	35.25	4.56	29.62	31.01						
run1	10/5/2010	8:44:00	-0.10	193.03	1.27	22.22	37.29						
run1	10/5/2010	8:44:15	-0.10	207.45	4.88	22.22	48.75						
run1	10/5/2010	8:44:30	-0.10	142.45	14.53	44.74	48.73						
run1	10/5/2010	8:44:45	-0.10	66.57	6.49	44.92	47.41						
run1	10/5/2010	8:45:00	-0.10	64.29	5.85	49.19	46.63						
run1	10/5/2010	8:45:15	-0.10	194.40	4.01	57.55	46.39						
run1	10/5/2010	8:45:30	-0.10	76.40	11.60	57.59	35.95						
run1	10/5/2010	8:45:45	-0.10	122.59	1.52	49.53	35.89						
run1	10/5/2010	8:46:00	-0.10	364.49	8.48	45.92	42.14						
run1	10/5/2010	8:46:15	-0.10	86.33	20.81	45.92	55.18						
run1	10/5/2010	8:46:30	-0.10	104.69	7.47	32.34	55.18						
run1	10/5/2010	8:46:45	-0.10	40.43	7.56	32.23	42.09						
run1	10/5/2010	8:47:00	-0.10	260.19	3.66	41.10	35.89						
run1	10/5/2010	8:47:15	-0.10	248.21	11.23	57.13	35.89						
run1	10/5/2010	8:47:30	-0.10	72.75	16.25	57.13	44.92						
run1	10/5/2010	8:47:45	-0.10	144.24	4.94	56.66	45.00						
run1	10/5/2010	8:48:00	-0.10	91.21	9.97	56.40	44.14						
run1	10/5/2010	8:48:15	-0.10	237.21	5.26	56.45	42.40						
run1	10/5/2010	8:48:30	-0.10	183.40	12.64	59.80	42.38						
run1	10/5/2010	8:48:45	-0.10	84.12	4.35	59.81	45.65						
run1	10/5/2010	8:49:00	-0.10	362.11	7.37	57.63	47.12						
run1	10/5/2010	8:49:15	-0.10	141.67	22.33	52.98	47.12						
run1	10/5/2010	8:49:30	-0.10	152.25	7.20	52.98	45.04						
run1	10/5/2010	8:49:45	-0.10	108.59	7.94	44.84	44.92						
run1	10/5/2010	8:50:00	-0.10	239.10	10.20	40.76	44.26						
run1	10/5/2010	8:50:15	-0.10	284.38	11.76	40.82	42.97						
run1	10/5/2010	8:50:30	-0.10	271.71	18.12	42.69	42.99						
run1	10/5/2010	8:50:45	-0.10	77.80	15.47	42.73	39.27						
run1	10/5/2010	8:51:00	-0.10	34.47	15.04	36.57	37.35						
run1	10/5/2010	8:51:15	-0.10	201.60	4.73	23.93	37.48						
run1	10/5/2010	8:51:30	-0.10	57.13	13.83	23.93	47.07						
run1	10/5/2010	8:51:45	-0.10	25.33	12.50	23.93	47.12						
run1	10/5/2010	8:52:00	-0.10	67.90	6.09	23.91	43.73						
run1	10/5/2010	8:52:15	-0.10	42.55	2.05	23.93	38.62						
run1	10/5/2010	8:52:30	-0.10	29.49	5.11	24.17	38.62						
run1	10/5/2010	8:52:45	-0.10	116.44	0.89	24.17	43.90						
run1	10/5/2010	8:53:00	-0.10	44.53	6.64	23.08	47.64						
run1	10/5/2010	8:53:15	-0.10	145.41	2.49	20.93	47.33						
run1	10/5/2010	8:53:30	-0.10	38.74	14.67	20.90	38.38						
run1	10/5/2010	8:53:45	-0.10	59.96	1.19	36.98	38.33						
run1	10/5/2010	8:54:00	-0.10	43.62	2.02	45.41	35.94						
run1	10/5/2010	8:54:15	-0.10	27.57	4.45	45.70	31.01						
run1	10/5/2010	8:54:30	-0.10	34.80	0.77	90.09	31.01						
run1	10/5/2010	8:54:45	-0.10	21.32	4.65	90.33	31.17						
run1	10/5/2010	8:55:00	-0.10	31.80	1.31	87.52	31.25						
run1	10/5/2010	8:55:15	-0.10	175.52	0.74	82.28	31.25						
run1	10/5/2010	8:55:30	-0.10	76.43	3.15	82.28	85.87						
run1	10/5/2010	8:55:45	-0.10	270.05	3.67	86.46	86.43						
averun1	10/5/2010	7:55:00	-0.10	143.61	9.44	56.71	56.81	60					
scg3	10/5/2010	8:56:15	-0.10	59.12	13.03	88.43	64.70	CC67301/cg3	O2	9.976		0	
scg3	10/5/2010	8:56:30	0.13	74.64	1.92	77.69	64.70	CC67301/cg3	O2	9.976		0	
scg3	10/5/2010	8:56:45	8.59	76.17	4.08	77.64	21.40	CC67301/cg3	O2	9.976		0	
scg3	10/5/2010	8:57:00	9.63	9.86	0.15	53.32	1.95	CC67301/cg3	O2	9.976		0	
scg3	10/5/2010	8:57:15	9.66	10.32	0.09	2.69	1.95	CC67301/cg3	O2	9.976		0	
o2span1	10/5/2010	8:57:15	9.66	10.32	0.09	2.69	1.95	CC67301/cg3	O2	9.976		0	
cozero1	10/5/2010	8:57:15	9.66	10.32	0.09	2.69	1.95	CC67301/cg3	O2	9.976		0	
noxzero1	10/5/2010	8:57:15	9.66	10.32	0.09	2.69	1.95	CC67301/cg3	O2	9.976		0	
sdg6	10/5/2010	8:57:45	9.68	11.23	0.05	1.79	3.42	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
sdg6	10/5/2010	8:58:00	8.73	18.07	0.16	1.38	2.70	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
sdg6	10/5/2010	8:58:15	0.27	185.84	24.44	1.32	1.43	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
sdg6	10/5/2010	8:58:30	0.01	201.66	36.19	6.30	1.38	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
sdg6	10/5/2010	8:58:45	-0.01	202.60	36.43	6.35	1.76	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
o2zero1	10/5/2010	8:58:45	-0.01	202.60	36.43	6.35	1.76	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
cospan1	10/5/2010	8:58:45	-0.01	202.60	36.43	6.35	1.76	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
noxspan1	10/5/2010	8:58:45	-0.01	202.60	36.43	6.35	1.76	SG9151612BAL/dg6	NOx	37.58	CO	194.52	
scg2	10/5/2010	8:59:15	-0.03	203.03	36.62	7.81	1.97	CC274805/cg2	O2	20.98		0	
scg2	10/5/2010	8:59:30	9.12	143.29	32.78	7.81	2.41	CC274805/cg2	O2	20.98		0	
scg2	10/5/2010	8:59:45	20.45	13.84	2.96	2.60	2.44	CC274805/cg2	O2	20.98		0	
scg2	10/5/2010	9:00:00	20.56	12.11	0.25	0.24	1.61	CC274805/cg2	O2	20.96		0	
scg2	10/5/2010	9:00:15	20.59	11.72	0.16	0.26	0.00	CC274805/cg2	O2	20.98		0	
thczero1	10/5/2010	9:00:15	20.59	11.72	0.16	0.26	0.00	CC274805/cg2	O2	20.98		0	
scg5	10/5/2010	9:00:30	20.60	11.59	0.10	0.24	0.00	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:00:45	20.59	11.49	0.10	0.24	0.16	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:01:00	7.89	11.26	0.19	122.15	0.26	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:01:15	0.13	10.09	0.07	342.29	0.24	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:01:30	0.04	10.03	0.05	342.30	1.94	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:01:45	0.01	10.19	0.05	393.02	1.95	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:02:00	-0.01	10.22	0.05	419.43	1.87	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:02:15	-0.02	10.12	0.05	419.63	1.71	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:02:30	-0.03	10.19	0.05	435.21	1.71	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:02:45	-0.04	10.22	0.05	435.30	1.87	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:03:00	-0.04	10.03	0.05	441.37	1.95	CC81292/cg5	THC	477.2		0	
scg5	10/5/2010	9:03:15	-0.04	9.96	0.05	454.10	1.95	CC81292/cg5	THC	477.2		0	

scg5	10/5/2010	9:03:30	-0.05	9.80	0.05	454.10	1.95	CC81292/cg5	THC	477.2	0
scg5	10/5/2010	9:03:45	-0.05	9.83	0.05	465.93	1.95	CC81292/cg5	THC	477.2	0
scg5	10/5/2010	9:04:00	-0.05	9.93	0.05	468.97	1.95	CC81292/cg5	THC	477.2	0
thcspan1	10/5/2010	9:03:30	-0.05	9.80	0.05	454.10	1.95	CC81292/cg5	THC	477.2	0
run2	10/5/2010	9:05:00	-0.10	45.80	3.94	293.77	27.83				
run2	10/5/2010	9:05:15	-0.10	106.97	1.98	52.73	28.13				
run2	10/5/2010	9:05:30	-0.10	55.08	6.31	52.73	70.56				
run2	10/5/2010	9:05:45	-0.10	43.16	3.86	50.24	70.80				
run2	10/5/2010	9:06:00	-0.06	71.35	4.32	49.07	58.27				
run2	10/5/2010	9:06:15	-0.10	69.37	4.84	49.07	35.40				
run2	10/5/2010	9:06:30	-0.09	150.59	5.13	51.48	35.40				
run2	10/5/2010	9:06:45	-0.09	132.59	4.32	51.51	39.11				
run2	10/5/2010	9:07:00	-0.09	224.09	6.33	51.68	41.02				
run2	10/5/2010	9:07:15	-0.10	375.29	12.41	52.00	41.21				
run2	10/5/2010	9:07:30	-0.09	400.13	17.85	52.00	49.28				
run2	10/5/2010	9:07:45	-0.10	279.40	22.37	52.00	49.32				
run2	10/5/2010	9:08:00	-0.09	62.17	33.34	52.00	38.56				
run2	10/5/2010	9:08:15	-0.09	75.98	4.28	52.00	16.11				
run2	10/5/2010	9:08:30	-0.09	132.91	1.52	42.32	16.11				
run2	10/5/2010	9:08:45	-0.10	66.44	2.33	42.24	28.91				
run2	10/5/2010	9:09:00	-0.10	128.97	3.70	41.21	34.91				
run2	10/5/2010	9:09:15	-0.09	304.13	6.71	39.31	34.91				
run2	10/5/2010	9:09:30	-0.09	223.11	21.32	39.31	49.90				
run2	10/5/2010	9:09:45	-0.10	121.84	7.24	36.88	50.05				
run2	10/5/2010	9:10:00	-0.09	88.97	14.93	35.65	44.14				
run2	10/5/2010	9:10:15	-0.10	205.83	9.32	35.71	32.72				
run2	10/5/2010	9:10:30	-0.10	81.93	6.28	38.31	32.72				
run2	10/5/2010	9:10:45	-0.10	70.80	7.04	38.33	35.74				
run2	10/5/2010	9:11:00	-0.10	47.98	3.55	35.25	37.11				
run2	10/5/2010	9:11:15	-0.10	25.75	8.86	28.81	37.11				
run2	10/5/2010	9:11:30	-0.09	137.63	4.80	28.81	20.36				
run2	10/5/2010	9:11:45	-0.09	38.74	3.32	21.48	20.20				
run2	10/5/2010	9:12:00	-0.09	45.28	0.80	17.82	24.97				
run2	10/5/2010	9:12:15	-0.10	33.37	10.60	17.63	33.69				
run2	10/5/2010	9:12:30	-0.10	21.62	9.47	11.77	33.69				
run2	10/5/2010	9:12:45	-0.10	40.53	0.50	11.72	33.20				
run2	10/5/2010	9:13:00	-0.10	71.19	1.25	19.78	32.96				
run2	10/5/2010	9:13:15	-0.09	177.15	1.93	35.89	32.89				
run2	10/5/2010	9:13:30	-0.10	51.20	5.89	35.89	35.63				
run2	10/5/2010	9:13:45	-0.10	53.84	2.26	33.35	35.65				
run2	10/5/2010	9:14:00	-0.10	110.61	4.37	32.23	37.92				
run2	10/5/2010	9:14:15	-0.10	57.91	6.93	32.23	42.71				
run2	10/5/2010	9:14:30	-0.09	66.93	3.39	36.33	42.73				
run2	10/5/2010	9:14:45	-0.10	122.27	5.75	36.38	43.85				
run2	10/5/2010	9:15:00	-0.10	65.20	5.26	39.11	44.43				
run2	10/5/2010	9:15:15	-0.09	296.62	5.10	44.34	44.39				
run2	10/5/2010	9:15:30	-0.10	258.46	9.85	44.34	42.73				
run2	10/5/2010	9:15:45	-0.09	59.21	11.14	38.49	42.73				
run2	10/5/2010	9:16:00	-0.09	127.60	7.85	35.38	42.94				
run2	10/5/2010	9:16:15	-0.09	357.88	8.22	35.24	43.36				
run2	10/5/2010	9:16:30	-0.10	41.05	21.46	26.64	43.34				
run2	10/5/2010	9:16:45	-0.10	97.49	2.10	26.61	35.76				
run2	10/5/2010	9:17:00	-0.10	39.91	4.67	27.65	32.23				
run2	10/5/2010	9:17:15	-0.10	60.16	2.70	29.54	32.23				
run2	10/5/2010	9:17:30	-0.09	257.26	3.18	29.54	50.62				
run2	10/5/2010	9:17:45	-0.09	44.24	9.47	30.84	50.78				
run2	10/5/2010	9:18:00	-0.10	57.23	5.10	31.49	45.52				
run2	10/5/2010	9:18:15	-0.10	233.33	3.57	31.67	35.65				
run2	10/5/2010	9:18:30	-0.10	146.84	7.70	37.99	35.65				
run2	10/5/2010	9:18:45	-0.09	550.91	10.44	38.04	41.37				
run2	10/5/2010	9:19:00	-0.09	94.21	21.71	40.23	44.42				
run2	10/5/2010	9:19:15	-0.10	182.68	13.58	44.68	44.43				
run2	10/5/2010	9:19:30	-0.09	153.65	7.17	44.68	47.35				
run2	10/5/2010	9:19:45	-0.09	75.85	11.20	43.69	47.36				
run2	10/5/2010	9:20:00	-0.10	413.61	10.72	43.21	46.42				
run2	10/5/2010	9:20:15	-0.09	235.16	18.19	43.23	44.68				
run2	10/5/2010	9:20:30	-0.09	68.52	27.73	32.08	44.68				
run2	10/5/2010	9:20:45	-0.10	259.80	3.80	31.98	44.21				
run2	10/5/2010	9:21:00	-0.10	153.78	7.02	40.02	43.95				
run2	10/5/2010	9:21:15	-0.09	137.34	9.43	56.15	44.09				
run2	10/5/2010	9:21:30	-0.10	40.66	9.09	56.15	49.77				
run2	10/5/2010	9:21:45	-0.09	37.99	8.95	35.04	49.81				
run2	10/5/2010	9:22:00	-0.10	137.79	2.66	25.88	44.58				
run2	10/5/2010	9:22:15	-0.10	32.13	17.60	25.88	33.69				
run2	10/5/2010	9:22:30	-0.10	81.32	3.03	25.15	33.69				
run2	10/5/2010	9:22:45	-0.09	31.25	5.69	25.15	24.46				
run2	10/5/2010	9:23:00	-0.10	36.30	2.09	27.05	20.12				
run2	10/5/2010	9:23:15	-0.09	31.19	2.58	30.52	20.41				
run2	10/5/2010	9:23:30	-0.10	69.01	0.65	30.52	28.22				
run2	10/5/2010	9:23:45	-0.10	165.20	2.32	38.88	28.32				
run2	10/5/2010	9:24:00	-0.10	81.87	6.06	43.21	30.24				
run2	10/5/2010	9:24:15	-0.10	60.97	5.20	43.12	34.18				
run2	10/5/2010	9:24:30	-0.09	202.25	8.70	37.63	34.18				
run2	10/5/2010	9:24:45	-0.09	176.66	8.31	37.60	37.53				
run2	10/5/2010	9:25:00	-0.10	32.13	12.37	33.27	39.06				

run2	10/5/2010	9:25:15	-0.10	189.23	1 57	24.17	39 06
run2	10/5/2010	9.25 30	-0 09	195.70	9.16	24.17	44.63
run2	10/5/2010	9:25 45	-0.10	37.83	7.80	25.46	44.68
run2	10/5/2010	9:26:00	-0.10	90.43	1.89	26.12	44.19
run2	10/5/2010	9:26:15	-0.10	46.26	14.28	25.98	43.33
run2	10/5/2010	9.26 30	-0.10	185.35	1.11	21 50	43 29
run2	10/5/2010	9:26 45	-0.10	113 22	1 96	21.48	34.10
run2	10/5/2010	9:27.00	-0.10	210.19	4.98	28.09	29.30
run2	10/5/2010	9:27:15	-0.10	138.97	11.28	38 33	30 00
run2	10/5/2010	9:27.30	-0 09	152 57	14.10	38 33	39 05
run2	10/5/2010	9:27.45	-0 09	77.67	9 58	36.85	39 06
run2	10/5/2010	9:28 00	-0 10	169.79	6 45	36 38	41 59
run2	10/5/2010	9:28 15	-0.09	226.47	16.44	35,94	44 92
run2	10/5/2010	9:28 30	-0 10	40.30	14.40	28.81	44.92
run2	10/5/2010	9:28 45	-0.09	97.98	1.93	28.81	34.70
run2	10/5/2010	9:29 00	-0 09	73 60	3 70	29.70	31.01
run2	10/5/2010	9:29 15	-0 10	58.92	6 53	30 99	31 51
run2	10/5/2010	9 29:30	-0 09	60.42	3 87	31.01	37.09
run2	10/5/2010	9 29:45	-0.09	19 99	16.84	19 55	37.11
run2	10/5/2010	9.30.00	-0.10	34.57	2.78	16.11	33.38
run2	10/5/2010	9:30:15	-0.09	77.12	0.41	17.22	27.59
run2	10/5/2010	9:30:30	-0 09	148.73	0.60	32.70	27 59
run2	10/5/2010	9:30:45	-0.10	75.26	2.81	32.72	32.55
run2	10/5/2010	9 31 00	-0 10	112.99	5.16	33.94	34.18
run2	10/5/2010	9:31 15	-0.10	176.86	6.57	35,65	33.66
run2	10/5/2010	9:31:30	-0.10	152.60	4.32	35 65	29.30
run2	10/5/2010	9:31 45	-0.09	154 85	10.97	41 88	29.30
run2	10/5/2010	9:32:00	-0.09	56 84	12.79	44 24	32.57
run2	10/5/2010	9.32 15	-0 10	45 57	8 37	43 88	37.60
run2	10/5/2010	9,32 30	-0 09	167.51	3.07	40.28	37.60
run2	10/5/2010	9:32:45	-0.10	39 71	4 23	40 28	30.91
run2	10/5/2010	9:33:00	-0 09	230 08	2 99	41 86	28 81
run2	10/5/2010	9:33 15	-0.09	90 85	13.96	43 95	29.56
run2	10/5/2010	9 33 30	-0 09	241 31	3 58	43.95	41 26
run2	10/5/2010	9:33:45	-0 10	45 15	9 58	31 49	41.26
run2	10/5/2010	9:34 00	-0 09	97 30	9.77	27 10	38 25
run2	10/5/2010	9:34 15	-0 10	85 25	18 19	28 50	34.18
run2	10/5/2010	9 34 30	-0 10	96 81	2 56	41 02	34 18
run2	10/5/2010	9:34 45	-0 10	45.64	1 71	41 02	35.76
run2	10/5/2010	9.35.00	-0.09	24 32	9.98	31.33	36.38
run2	10/5/2010	9:35 15	-0.10	31 35	5.15	16.85	35.87
run2	10/5/2010	9 35 30	-0 10	44.69	0 37	16.85	30 27
run2	10/5/2010	9,35 45	-0.09	54 20	1 36	34.57	30.27
run2	10/5/2010	9 36 00	-0.09	136 36	2.47	40.28	34.75
run2	10/5/2010	9:36 15	-0.09	83 63	8.81	39.68	40.63
run2	10/5/2010	9 36 30	-0.09	34.41	8 70	30.27	40.64
run2	10/5/2010	9:36 45	-0.10	78.94	2.99	30.27	35 91
run2	10/5/2010	9 37 00	-0 09	292.94	6 20	37.13	34.18
run2	10/5/2010	9 37 15	-0 09	105.31	18 98	46.63	34.47
run2	10/5/2010	9:37 30	-0 09	111 07	3.06	46.63	37.35
run2	10/5/2010	9 37:45	-0 09	282 65	8 70	41.98	37.35
run2	10/5/2010	9 38 00	-0.09	62 14	21.28	40 54	33 51
run2	10/5/2010	9 38 15	-0 09	82 29	7 34	39.70	27 59
run2	10/5/2010	9 38 30	-0 09	125 36	5.41	29 30	27 59
run2	10/5/2010	9 38 45	-0 09	128.22	9 23	29 30	33 87
run2	10/5/2010	9 39:00	-0 10	57 72	8.29	31 61	35 89
run2	10/5/2010	9 39 15	-0 09	179 10	4.40	34 67	37 13
run2	10/5/2010	9 39 30	-0.09	91.96	12 08	34.65	48 58
run2	10/5/2010	9 39.45	-0.09	180.27	5.80	36 08	48.58
run2	10/5/2010	9.40.00	-0.09	110 68	13.85	36.62	43.82
run2	10/5/2010	9.40 15	-0 09	38 48	10.00	36 30	37.11
run2	10/5/2010	9.40 30	-0 09	86 36	4 27	32 96	37 11
run2	10/5/2010	9 40 45	-0 09	127 47	4.24	32 96	39 05
run2	10/5/2010	9.41 00	-0.09	367 51	10.30	36.61	39.73
run2	10/5/2010	9:41 15	-0.09	329.59	10.43	42.24	39.99
run2	10/5/2010	9,41 30	-0.09	74.09	19.87	42 24	43 95
run2	10/5/2010	9 41 45	-0 09	178.03	10 30	32.55	43 95
run2	10/5/2010	9.42 00	-0.09	131 48	8.70	29 30	37.48
run2	10/5/2010	9 42.15	-0 09	384.86	9.08	28 56	28 81
run2	10/5/2010	9:42 30	-0.09	118 75	18 86	22 22	28 81
run2	10/5/2010	9:42 45	-0.09	136.33	4 88	22 22	30 40
run2	10/5/2010	9:43 00	-0.09	48.54	11 10	24 79	30 99
run2	10/5/2010	9:43.15	-0 09	151 56	3 73	28.56	32 00
run2	10/5/2010	9 43.30	-0 09	253 09	13.03	28 56	42 56
run2	10/5/2010	9:43 45	-0 09	251 86	23 87	25.41	42 59
run2	10/5/2010	9 44 00	-0.09	204 20	9 43	24.41	35 08
run2	10/5/2010	9:44 15	-0.09	37.31	11 68	24.20	25.15
run2	10/5/2010	9.44 30	-0 10	135.25	5 85	20 77	25.15
run2	10/5/2010	9:44.45	-0 09	141.34	7 41	20.75	29 74
run2	10/5/2010	9 45:00	-0.09	66.18	8.37	22 72	31 25
run2	10/5/2010	9 45:15	-0 09	91.18	9 00	25 39	30.52
run2	10/5/2010	9:45 30	-0 09	157.29	5.50	25 39	23.45
run2	10/5/2010	9:45 45	-0.09	356 48	4.81	39 60	23 44
run2	10/5/2010	9:46:00	-0.09	43.62	16 96	44 92	21.21
run2	10/5/2010	9 46 15	-0 09	58 24	2.68	43.70	17 82

run2	10/5/2010	9:46:30	-0 09	33.56	7.11	29.56	17.82				
run2	10/5/2010	9:46 45	-0.09	29.10	3 38	29.54	20 82				
run2	10/5/2010	9 47 00	-0 09	67.61	3.45	26.61	21.73				
run2	10/5/2010	9 47 15	-0.09	19.76	20.20	22.71	21.01				
run2	10/5/2010	9 47:30	-0.09	15.59	13.18	22.71	9.78				
run2	10/5/2010	9:47:45	-0.10	70.28	0 27	22.71	9 77				
run2	10/5/2010	9:48.00	-0.09	139.03	0 46	22.71	22.28				
run2	10/5/2010	9:48:15	-0.09	187.57	2.89	24.48	39.71				
run2	10/5/2010	9 48 30	-0.09	175.94	2.83	42.24	39.76				
run2	10/5/2010	9 48,45	-0.09	162.89	2 63	42.24	40.15				
run2	10/5/2010	9 49:00	-0 09	411.75	8.52	46 13	40.28				
run2	10/5/2010	9:49:15	-0.09	129.46	21.92	52.00	40.38				
run2	10/5/2010	9:49:30	-0 09	103,65	6.37	52 00	41.52				
run2	10/5/2010	9:49 45	-0 09	68 98	9.06	41 63	41.50				
run2	10/5/2010	9.50,00	-0.09	251.82	1 95	38 33	46.01				
run2	10/5/2010	9:50:15	-0.09	161 26	6 02	37.97	52.00				
run2	10/5/2010	9:50:30	-0.09	264.42	2.84	34 67	52.00				
run2	10/5/2010	9,50 45	-0 09	280.08	13 46	34 67	43.95				
run2	10/5/2010	9 51:00	-0.09	543.78	11.41	41 41	41.02				
run2	10/5/2010	9:51 15	-0 09	42.68	30 83	51 03	40 50				
run2	10/5/2010	9 51 30	-0 09	28 61	7 87	51 03	35.65				
run2	10/5/2010	9 51:45	-0.09	333 98	2 71	39 23	35.65				
run2	10/5/2010	9:52 00	-0 09	259.64	7 15	35 65	34.20				
run2	10/5/2010	9 52:15	-0 09	139 58	7.40	36.67	31.98				
run2	10/5/2010	9 52 30	-0.09	316 54	4.81	49.79	31.98				
run2	10/5/2010	9 52.45	-0.09	45.15	13.25	49.81	30 34				
run2	10/5/2010	9 53 00	-0.09	232.72	4 57	50.02	29 79				
run2	10/5/2010	9.53:15	-0.09	29.98	15.66	50.29	27.96				
run2	10/5/2010	9.53.30	-0.09	111.85	7.24	50.29	19.06				
run2	10/5/2010	9:53:45	-0.09	107.10	2.18	33.07	19 06				
run2	10/5/2010	9:54:00	-0.09	105.34	8 07	28.56	21.79				
run2	10/5/2010	9:54:15	-0.09	68.69	9 11	26.56	24.90				
run2	10/5/2010	9:54:30	-0.09	23.70	13 98	15.85	24.90				
run2	10/5/2010	9:54.45	-0 09	261.78	1.33	15.85	33.79				
run2	10/5/2010	9:55:00	-0.09	61 23	7.75	23.23	35.65				
run2	10/5/2010	9:55.15	-0 09	47.14	7.43	30.52	33.35				
run2	10/5/2010	9:55:30	-0 10	46.91	3.38	30.52	18.56				
run2	10/5/2010	9:55.45	-0.09	260.38	1.06	37.89	18.56				
run2	10/5/2010	9:56.00	-0.09	253.87	6.12	39.65	31.07				
run2	10/5/2010	9:56,15	-0 09	125 91	22.10	37.32	44.40				
run2	10/5/2010	9 56 30	-0 09	82 98	9.40	25 88	44.40				
run2	10/5/2010	9 56.45	-0 09	21 16	23.19	25,88	22.31				
run2	10/5/2010	9 57:00	-0.09	16.02	43.08	19.95	18.10				
run2	10/5/2010	9:57 15	-0.09	39.19	4.68	13.18	19 53				
run2	10/5/2010	9:57 30	-0.09	139.19	0.39	13.18	27 59				
run2	10/5/2010	9:57:45	-0.09	88.18	1.53	34.78	27.59				
run2	10/5/2010	9.58 00	-0.09	186.17	1.63	39.31	39.21				
run2	10/5/2010	9 58:15	-0.09	69.14	3.96	39.36	50 78				
run2	10/5/2010	9 58.30	-0.09	34.34	4.62	39.71	50 78				
run2	10/5/2010	9:58:45	-0.09	99.06	3 39	39.71	33 77				
run2	10/5/2010	9:59 00	-0 09	370 93	5.83	37.76	29 54				
run2	10/5/2010	9 59 15	-0.09	69.47	21.69	35 65	29.07				
run2	10/5/2010	9:59 30	-0.09	188 87	7.02	35 65	26 61				
run2	10/5/2010	9.59 45	-0.09	65.66	11 38	29.13	26 61				
run2	10/5/2010	10:00 00	-0 09	145.48	2.82	27 83	38 40				
run2	10/5/2010	10:00:15	-0 09	39 03	12 58	27.41	50 05				
run2	10/5/2010	10 00:30	-0 09	174 90	4.01	24 90	50 05				
run2	10/5/2010	10:00:45	-0 09	25 72	32 84	24 90	29.48				
run2	10/5/2010	10 01:00	-0 09	43.42	3 82	25 51	24.90				
run2	10/5/2010	10:01:15	-0.09	97.01	0 64	26.12	28 17				
run2	10/5/2010	10 01 30	-0 10	76 73	1.48	26.12	43.70				
run2	10/5/2010	10:01:45	-0 10	536 85	1 72	71 39	43.70				
run2	10/5/2010	10:02:00	-0 10	179 62	10,83	82 67	50.05				
run2	10/5/2010	10.02:15	-0.10	96.26	11 22	80 11	57 13				
run2	10/5/2010	10 02.30	-0 10	42.74	18.25	66.41	57 13				
run2	10/5/2010	10 02:45	-0 10	42.29	11 71	66.41	52.04				
run2	10/5/2010	10,03.00	-0.10	52.12	4 40	61.49	51.03				
run2	10/5/2010	10 03 15	-0.10	115 79	4.20	56.67	52 36				
run2	10/5/2010	10,03:30	-0 10	121.88	1 75	56 66	60 51				
run2	10/5/2010	10 03 45	-0.10	29.17	17.27	44 73	60 53				
run2	10/5/2010	10 04 00	-0 10	20.28	14.93	41.99	39.27				
run2	10/5/2010	10 04 15	-0 10	70 35	0.51	46 34	17 58				
run2	10/5/2010	10 04 30	-0 10	92 25	3 78	67.87	17 58				
run2	10/5/2010	10:04:45	-0.10	129 26	0.63	67.87	40 82				
run2	10/5/2010	10:05.00	-0 10	98 05	9 19	57 68	45 41				
run2	10/5/2010	10 05 15	-0 10	194 21	2 46	46 63	48 00				
run2	10/5/2010	10:05:30	-0.10	51.60	5.82	46 63	62.50				
run2	10/5/2010	10 05.45	-0 10	167.77	1 25	55 32	62 50				
run2	10/5/2010	10:06 00	-0.10	132.06	14 32	57 13	59 28				
run2	10/5/2010	10.06:15	-0.10	27 83	9 54	54 57	56.15				
run2	10/5/2010	10 06 30	-0.10	22 69	8 55	38 05	56 15				
averun2	10/5/2010	9:06:00	-0 09	128 38	8,07	36.01	36 29	60			
scg3	10/5/2010	10,06 45	-0 10	149.35	0 63	38 09	65.84	CC67301/cg3	O2	9.976	0
scg3	10/5/2010	10:07:00	0.24	41.24	2 18	50.15	68 12	CC67301/cg3	O2	9.976	0
scg3	10/5/2010	10 07:15	8 58	22 75	0 49	62.50	58 89	CC67301/cg3	O2	9.976	0

scg3	10/5/2010	10:07:30	9.64	8.11	0.05	62.50	1.30	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	10:07:45	9.66	8.69	0.05	10.79	1.29	CC67301/cg3	O2	9.976		0
o2span1	10/5/2010	10:07:45	9.66	8.69	0.05	10.79	1.29	CC67301/cg3	O2	9.976		0
cozero1	10/5/2010	10:07:45	9.66	8.69	0.05	10.79	1.29	CC67301/cg3	O2	9.976		0
noxzero1	10/5/2010	10:07:45	9.66	8.69	0.05	10.79	1.29	CC67301/cg3	O2	9.976		0
sdg6	10/5/2010	10:08:15	9.68	9.60	0.05	1.03	0.70	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	10:08:30	6.74	47.17	1.76	1.28	0.73	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	10:08:45	0.08	196.13	31.50	1.25	1.53	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	10:09:00	0.00	199.68	37.33	3.83	1.71	SG9151612BAL/dg6	NOx	37.58	CO	194.52
o2zero1	10/5/2010	10:09:00	0.00	199.68	37.33	3.83	1.71	SG9151612BAL/dg6	NOx	37.58	CO	194.52
cospan1	10/5/2010	10:09:00	0.00	199.68	37.33	3.83	1.71	SG9151612BAL/dg6	NOx	37.58	CO	194.52
noxspan1	10/5/2010	10:09:00	0.00	199.68	37.33	3.83	1.71	SG9151612BAL/dg6	NOx	37.58	CO	194.52
scg2	10/5/2010	10:09:15	-0.02	200.20	37.58	6.35	1.76	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	10:09:30	-0.02	200.68	37.72	6.35	1.95	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	10:09:45	11.65	118.98	31.04	6.15	1.95	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	10:10:00	20.49	11.82	1.62	6.10	0.77	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	10:10:15	20.56	10.74	0.26	5.16	-0.49	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	10:10:30	20.59	10.29	0.17	0.24	-0.46	CC274805/cg2	O2	20.98		0
thczero1	10/5/2010	10:10:30	20.59	10.29	0.17	0.24	-0.46	CC274805/cg2	O2	20.98		0
scg5	10/5/2010	10:10:45	20.61	10.42	0.10	0.28	-0.07	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:11:00	20.57	10.42	0.10	0.11	0.00	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:11:15	7.61	10.71	0.38	0.00	0.24	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:11:30	0.13	8.76	0.08	0.00	1.71	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:11:45	0.05	8.72	0.05	256.48	1.71	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:12:00	0.01	8.56	0.05	313.48	1.84	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:12:15	-0.01	8.56	0.05	320.41	1.95	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:12:30	-0.02	8.37	0.05	413.91	1.95	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:12:45	-0.02	8.50	0.05	413.91	2.31	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:13:00	-0.03	8.69	0.05	434.40	2.43	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:13:15	-0.04	8.59	0.05	455.73	2.34	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	10:13:30	-0.04	8.30	0.05	455.73	1.95	CC81292/cg5	THC	477.2		0
thcspan1	10/5/2010	10:11:15	7.61	10.71	0.38	455.73	2.34	CC81292/cg5	THC	477.2		0
run3	10/5/2010	10:14:15	-0.05	11.82	0.27	344.11	1.95					
run3	10/5/2010	10:14:30	-0.09	190.30	6.41	150.29	1.95					
run3	10/5/2010	10:14:45	-0.09	402.73	14.99	150.21	53.94					
run3	10/5/2010	10:15:00	-0.10	57.16	24.41	90.54	65.92					
run3	10/5/2010	10:15:15	-0.09	447.27	2.76	28.32	61.00					
run3	10/5/2010	10:15:30	-0.10	217.03	5.98	28.32	36.62					
run3	10/5/2010	10:15:45	-0.09	147.88	14.15	30.55	36.62					
run3	10/5/2010	10:16:00	-0.09	326.73	11.35	31.01	36.15					
run3	10/5/2010	10:16:15	-0.09	190.20	38.53	28.89	35.65					
run3	10/5/2010	10:16:30	-0.09	195.67	1.43	17.09	35.65					
run3	10/5/2010	10:16:45	-0.09	293.62	8.84	17.09	32.21					
run3	10/5/2010	10:17:00	-0.09	242.97	12.91	19.95	31.49					
run3	10/5/2010	10:17:15	-0.10	153.29	3.91	22.74	31.46					
run3	10/5/2010	10:17:30	-0.10	36.56	29.38	22.84	31.25					
run3	10/5/2010	10:17:45	-0.10	149.84	2.88	27.67	31.25					
run3	10/5/2010	10:18:00	-0.10	56.09	6.65	28.81	29.09					
run3	10/5/2010	10:18:15	-0.10	44.56	6.44	28.50	26.86					
run3	10/5/2010	10:18:30	-0.10	25.29	8.09	26.86	26.86					
run3	10/5/2010	10:18:45	-0.10	21.68	3.70	26.86	17.90					
run3	10/5/2010	10:19:00	-0.10	37.92	0.71	28.00	16.11					
run3	10/5/2010	10:19:15	-0.10	33.40	4.17	29.30	18.57					
run3	10/5/2010	10:19:30	-0.10	177.15	1.60	29.30	32.96					
run3	10/5/2010	10:19:45	-0.10	84.05	9.90	30.68	32.96					
run3	10/5/2010	10:20:00	-0.10	271.71	6.06	31.01	32.96					
run3	10/5/2010	10:20:15	-0.10	88.61	7.50	31.87	32.96					
run3	10/5/2010	10:20:30	-0.10	63.25	4.12	35.89	32.96					
run3	10/5/2010	10:20:45	-0.10	378.55	2.81	35.89	31.01					
run3	10/5/2010	10:21:00	-0.10	383.40	19.68	31.62	30.52					
run3	10/5/2010	10:21:15	-0.10	52.77	9.21	27.10	28.55					
run3	10/5/2010	10:21:30	-0.10	75.23	11.92	27.13	18.20					
run3	10/5/2010	10:21:45	-0.10	117.97	2.64	34.46	18.21					
run3	10/5/2010	10:22:00	-0.10	130.63	18.20	35.89	20.25					
run3	10/5/2010	10:22:15	-0.10	301.11	12.73	33.68	22.22					
run3	10/5/2010	10:22:30	-0.10	99.22	26.26	20.20	22.22					
run3	10/5/2010	10:22:45	-0.10	76.43	10.38	20.23	24.94					
run3	10/5/2010	10:23:00	-0.10	36.78	2.43	23.16	25.51					
run3	10/5/2010	10:23:15	-0.10	171.97	1.88	26.12	27.38					
run3	10/5/2010	10:23:30	-0.10	395.48	9.71	26.12	36.62					
run3	10/5/2010	10:23:45	-0.10	58.30	20.98	25.15	36.62					
run3	10/5/2010	10:24:00	-0.10	191.37	10.65	24.90	30.66					
run3	10/5/2010	10:24:15	-0.10	115.37	8.37	25.26	24.17					
run3	10/5/2010	10:24:30	-0.10	203.16	9.57	27.12	24.17					
run3	10/5/2010	10:24:45	-0.10	365.59	21.67	27.10	35.40					
run3	10/5/2010	10:25:00	-0.10	30.11	28.80	21.06	37.60					
run3	10/5/2010	10:25:15	-0.10	25.75	10.10	15.14	35.78					
run3	10/5/2010	10:25:30	-0.10	39.91	1.56	15.14	23.93					
run3	10/5/2010	10:25:45	-0.10	34.18	3.86	17.14	23.93					
run3	10/5/2010	10:26:00	-0.10	21.84	10.35	17.58	17.77					
run3	10/5/2010	10:26:15	-0.10	25.98	3.94	19.19	11.48					
run3	10/5/2010	10:26:30	-0.10	185.65	0.47	27.10	11.48					
run3	10/5/2010	10:26:45	-0.10	78.29	3.92	27.15	31.15					
run3	10/5/2010	10:27:00	-0.10	50.46	6.26	29.56	34.91					
run3	10/5/2010	10:27:15	-0.10	33.27	3.68	32.23	31.82					

run3	10/5/2010	10 27:30	-0.10	291.60	2 99	32 23	14.40
run3	10/5/2010	10:27:45	-0.10	294.08	5 45	38.49	14 40
run3	10/5/2010	10 28 00	-0.10	562.18	15 25	39.80	29 35
run3	10/5/2010	10:28:15	-0.10	120.31	39.09	38.38	43.95
run3	10/5/2010	10;28:30	-0.10	173 67	6.81	28.56	43 96
run3	10/5/2010	10:28:45	-0 10	178.45	14 30	28.56	34.44
run3	10/5/2010	10:29 00	-0.10	173 21	18.32	30 60	32 23
run3	10/5/2010	10 29:15	-0 10	54.04	19 30	32.72	30.21
run3	10/5/2010	10 29:30	-0 10	23 44	15 05	32.72	19.84
run3	10/5/2010	10:29:45	-0 10	156 45	1 64	34 34	19.82
run3	10/5/2010	10 30:00	-0.09	221.91	4.59	34.67	26.76
run3	10/5/2010	10 30 15	-0.09	65.04	13 75	35.06	34.67
run3	10/5/2010	10 30:30	-0 09	46.06	14.87	37 35	34.67
run3	10/5/2010	10 30 45	-0.10	26 40	9 11	37 35	13.95
run3	10/5/2010	10,31 00	-0 09	44 37	1.15	29 25	9.52
run3	10/5/2010	10 31 15	-0.09	224.28	1 52	21.24	12.96
run3	10/5/2010	10:31:30	-0.09	210.16	3.76	21.24	29.54
run3	10/5/2010	10 31:45	-0.09	49.22	10 04	24.98	29 54
run3	10/5/2010	10:32,00	-0.09	98 73	4.83	25.88	29 20
run3	10/5/2010	10 32:15	-0 09	56.60	3.70	27.18	28.81
run3	10/5/2010	10 32 30	-0.09	62.99	4.20	33.94	28.81
run3	10/5/2010	10:32 45	-0.09	162.76	7.36	33.94	38 01
run3	10/5/2010	10 33 00	-0 09	57.23	7.56	28.99	39.80
run3	10/5/2010	10 33:15	-0.09	53.81	5.02	23 19	37.91
run3	10/5/2010	10:33:30	-0 09	77 12	4.22	23 19	26 86
run3	10/5/2010	10:33 45	-0 09	22 04	10 36	15 54	26.86
run3	10/5/2010	10:34,00	-0.09	20.57	3.96	13 92	21.53
run3	10/5/2010	10:34 15	-0 09	155.08	0 66	18 29	16 11
run3	10/5/2010	10:34 30	-0.09	680 73	6 98	39 31	16.11
run3	10/5/2010	10:34:45	-0.09	152.34	16.05	39 31	28 43
run3	10/5/2010	10 35:00	-0 09	330 01	12 28	39 31	31.49
run3	10/5/2010	10,35:15	-0 09	536.85	17 04	39 31	32 98
run3	10/5/2010	10 35:30	-0.09	234.73	38.41	39 31	40.77
run3	10/5/2010	10 35 45	-0.09	257 98	11 48	38 28	40.77
run3	10/5/2010	10,36,00	-0.09	113 67	15 91	38.09	33.95
run3	10/5/2010	10 36:15	-0.09	54 04	7.76	36.56	27.21
run3	10/5/2010	10 36 30	-0.09	35.12	15.51	27.13	27.26
run3	10/5/2010	10,36 45	-0 09	84 41	8.52	27 12	23 13
run3	10/5/2010	10 37 00	-0.09	120.15	3 72	25 18	22.22
run3	10/5/2010	10 37.15	-0.09	164.03	3.01	23 19	25.67
run3	10/5/2010	10:37 30	-0.09	397.85	15.51	23.19	42.38
run3	10/5/2010	10:37.45	-0 09	135.12	21 17	28.43	42.43
run3	10/5/2010	10:38:00	-0.09	154 49	15 99	29.79	37.57
run3	10/5/2010	10 38:15	-0.09	111.46	6 22	30.27	32.23
run3	10/5/2010	10 38 30	-0.09	250.36	11 05	32.96	32.23
run3	10/5/2010	10 38.45	-0 09	277.25	14 55	32 96	29 80
run3	10/5/2010	10 39.00	-0.09	126.66	33.27	31 25	29.30
run3	10/5/2010	10.39 15	-0 09	44 40	14 99	29 54	29.07
run3	10/5/2010	10 39 30	-0 09	69 99	5.81	29 54	27.59
run3	10/5/2010	10 39:45	-0 09	27 70	10 89	21 68	27.59
run3	10/5/2010	10 40 00	-0 09	28 94	5 37	19 81	22.27
run3	10/5/2010	10.40 15	-0 09	47 75	1 46	22.61	16.85
run3	10/5/2010	10:40 30	-0.09	125.55	0 93	36 62	16.85
run3	10/5/2010	10 40:45	-0.09	65.45	4 76	36.62	30 94
run3	10/5/2010	10.41 00	-0 09	37.44	4 41	30 94	33.69
run3	10/5/2010	10 41 15	-0 09	46 22	4 23	24 56	33.32
run3	10/5/2010	10:41 30	-0.09	33 04	6 40	24 54	31 25
run3	10/5/2010	10 41.45	-0 09	130.05	3 25	24 85	31 25
run3	10/5/2010	10 42.00	-0.09	62.66	8 39	24.90	23.84
run3	10/5/2010	10:42 15	-0 09	22.66	9.79	22.74	16.60
run3	10/5/2010	10 42 30	-0 09	72 46	5.05	12.21	16 60
run3	10/5/2010	10 42.45	-0 09	35 22	2.86	12.21	23 54
run3	10/5/2010	10 43.00	-0.09	30.57	8.01	13.30	25 15
run3	10/5/2010	10.43 15	-0 09	178 52	0.24	14.40	27.59
run3	10/5/2010	10 43,30	-0 09	249 90	2 19	14 40	40.28
run3	10/5/2010	10:43 45	-0.09	226 14	5.40	40 27	40.28
run3	10/5/2010	10:44,00	-0 09	213 22	19 83	45.41	36 07
run3	10/5/2010	10,44 15	-0 09	319 21	3.69	44 12	31 25
run3	10/5/2010	10 44:30	-0 09	164 39	8 27	36 62	31 25
run3	10/5/2010	10:44 45	-0.09	67.12	12 83	36 62	28 81
run3	10/5/2010	10 45:00	-0 09	54 95	8 29	33 94	28.32
run3	10/5/2010	10.45 15	-0 09	57 45	6.57	31 25	26 69
run3	10/5/2010	10 45:30	-0 09	31 19	5 01	31 25	18 80
run3	10/5/2010	10:45 45	-0.09	88 97	3 19	33 98	18 80
run3	10/5/2010	10 46:00	-0.09	105.79	5 62	34 67	27 02
run3	10/5/2010	10.46:15	-0.09	161 17	4 95	32 93	35 89
run3	10/5/2010	10.46.30	-0.09	194.47	5 32	23 57	35 89
run3	10/5/2010	10 46:45	-0 09	140 63	10 35	23.57	28 14
run3	10/5/2010	10:47 00	-0 09	213 38	8 86	38 48	26.61
run3	10/5/2010	10 47 15	-0 09	264 55	14.40	49.07	29 80
run3	10/5/2010	10 47:30	-0 09	198.70	21 39	49.07	50 31
run3	10/5/2010	10 47.45	-0.09	205 60	17 16	45.46	50 33
run3	10/5/2010	10:48 00	-0.09	33 14	8 98	44 68	39 71
run3	10/5/2010	10.48:15	-0.09	89 13	3 18	43 21	28 81
run3	10/5/2010	10 48 30	-0 09	159.05	7 36	35 89	28 81

run3	10/5/2010	10:48:45	-0.09	27.54	19.44	35.89	19.82
run3	10/5/2010	10:49:00	-0.09	35.35	2.54	31.58	17.58
run3	10/5/2010	10:49:15	-0.10	68.85	0.69	26.86	20.12
run3	10/5/2010	10:49:30	-0.09	435.91	2.31	26.86	33.94
run3	10/5/2010	10:49:45	-0.09	153.74	10.25	37.00	33.94
run3	10/5/2010	10:50:00	-0.09	164.71	20.20	39.06	38.01
run3	10/5/2010	10:50:15	-0.09	23.41	37.80	35.71	41.99
run3	10/5/2010	10:50:30	-0.09	16.08	18.90	12.45	41.99
run3	10/5/2010	10:50:45	-0.09	76.56	0.37	12.45	27.30
run3	10/5/2010	10:51:00	-0.09	118.29	0.41	22.14	23.93
run3	10/5/2010	10:51:15	-0.09	247.53	2.42	32.23	25.94
run3	10/5/2010	10:51:30	-0.09	150.46	5.51	32.23	35.89
run3	10/5/2010	10:51:45	-0.09	197.20	7.70	41.02	35.89
run3	10/5/2010	10:52:00	-0.09	241.02	13.12	42.73	36.12
run3	10/5/2010	10:52:15	-0.09	128.45	12.24	40.80	36.38
run3	10/5/2010	10:52:30	-0.09	260.78	11.21	30.27	36.38
run3	10/5/2010	10:52:45	-0.09	241.57	15.10	30.27	46.29
run3	10/5/2010	10:53:00	-0.09	59.47	24.31	28.56	48.34
run3	10/5/2010	10:53:15	-0.09	29.07	7.89	26.86	41.99
run3	10/5/2010	10:53:30	-0.09	194.37	1.35	26.86	22.48
run3	10/5/2010	10:53:45	-0.09	168.26	8.40	39.76	22.49
run3	10/5/2010	10:54:00	-0.09	25.23	17.15	41.02	17.55
run3	10/5/2010	10:54:15	-0.09	37.34	2.93	39.94	13.43
run3	10/5/2010	10:54:30	-0.09	327.70	1.72	36.38	13.43
run3	10/5/2010	10:54:45	-0.09	48.67	5.54	36.38	29.80
run3	10/5/2010	10:55:00	-0.09	59.02	2.16	39.40	31.49
run3	10/5/2010	10:55:15	-0.09	134.41	9.82	41.55	30.05
run3	10/5/2010	10:55:30	-0.09	63.61	7.71	41.57	24.58
run3	10/5/2010	10:55:45	-0.09	334.54	1.65	45.44	24.54
run3	10/5/2010	10:56:00	-0.09	180.44	9.58	45.90	39.49
run3	10/5/2010	10:56:15	-0.09	96.22	10.16	48.94	50.78
run3	10/5/2010	10:56:30	-0.09	304.00	10.84	58.59	50.78
run3	10/5/2010	10:56:45	-0.09	31.06	12.50	58.59	27.17
run3	10/5/2010	10:57:00	-0.09	46.75	1.57	49.64	24.90
run3	10/5/2010	10:57:15	-0.09	28.16	4.90	42.24	26.34
run3	10/5/2010	10:57:30	-0.09	126.43	0.81	42.25	31.25
run3	10/5/2010	10:57:45	-0.09	173.70	6.81	51.03	31.25
run3	10/5/2010	10:58:00	-0.09	136.46	12.74	52.00	31.67
run3	10/5/2010	10:58:15	-0.09	150.52	1.13	49.14	31.98
run3	10/5/2010	10:58:30	-0.09	66.21	24.37	40.28	31.98
run3	10/5/2010	10:58:45	-0.09	88.90	2.33	40.28	30.49
run3	10/5/2010	10:59:00	-0.09	30.86	4.51	30.09	30.27
run3	10/5/2010	10:59:15	-0.09	66.15	0.73	22.22	37.47
run3	10/5/2010	10:59:30	-0.09	397.35	13.86	22.22	60.55
run3	10/5/2010	10:59:45	-0.10	28.81	20.60	15.53	60.55
run3	10/5/2010	11:00:00	-0.10	91.18	0.57	14.89	50.39
run3	10/5/2010	11:00:15	-0.09	31.90	3.22	17.03	41.99
run3	10/5/2010	11:00:30	-0.09	25.36	4.42	24.48	41.99
run3	10/5/2010	11:00:45	-0.09	66.28	1.94	24.45	28.71
run3	10/5/2010	11:01:00	-0.09	89.16	1.13	26.81	27.21
run3	10/5/2010	11:01:15	-0.09	146.03	3.92	28.56	31.51
run3	10/5/2010	11:01:30	-0.09	162.69	7.53	28.56	44.92
run3	10/5/2010	11:01:45	-0.09	103.91	21.62	40.53	44.94
run3	10/5/2010	11:02:00	-0.09	83.89	5.99	42.25	43.69
run3	10/5/2010	11:02:15	-0.09	69.47	9.20	40.22	42.73
run3	10/5/2010	11:02:30	-0.09	203.84	6.27	33.69	42.73
run3	10/5/2010	11:02:45	-0.09	374.12	9.55	33.69	45.41
run3	10/5/2010	11:03:00	-0.09	195.90	41.20	33.98	45.65
run3	10/5/2010	11:03:15	-0.09	94.99	5.69	34.18	43.38
run3	10/5/2010	11:03:30	-0.09	39.03	24.04	34.18	34.91
run3	10/5/2010	11:03:45	-0.09	23.28	9.79	21.99	34.91
run3	10/5/2010	11:04:00	-0.09	104.59	1.88	20.51	41.47
run3	10/5/2010	11:04:15	-0.09	80.27	2.17	22.30	46.39
run3	10/5/2010	11:04:30	-0.09	69.69	20.67	27.83	46.39
run3	10/5/2010	11:04:45	-0.09	51.89	6.70	27.83	14.50
run3	10/5/2010	11:05:00	-0.09	153.61	0.71	38.70	11.48
run3	10/5/2010	11:05:15	-0.09	88.44	3.80	47.36	17.62
run3	10/5/2010	11:05:30	-0.09	37.47	16.38	47.36	39.31
run3	10/5/2010	11:05:45	-0.09	53.74	4.55	43.70	39.31
run3	10/5/2010	11:06:00	-0.09	22.27	16.30	43.34	29.22
run3	10/5/2010	11:06:15	-0.09	38.12	13.28	37.32	21.83
run3	10/5/2010	11:06:30	-0.09	53.68	0.39	14.40	21.79
run3	10/5/2010	11:06:45	-0.09	44.37	0.36	14.40	30.03
run3	10/5/2010	11:07:00	-0.09	54.10	0.71	25.67	31.01
run3	10/5/2010	11:07:15	-0.09	190.82	2.55	34.18	31.48
run3	10/5/2010	11:07:30	-0.09	154.88	6.52	34.18	32.96
run3	10/5/2010	11:07:45	-0.09	129.07	11.36	40.19	32.96
run3	10/5/2010	11:08:00	-0.09	325.36	21.62	40.76	35.94
run3	10/5/2010	11:08:15	-0.09	24.84	27.44	34.15	38.33
run3	10/5/2010	11:08:30	-0.09	43.62	1.34	11.72	38.33
run3	10/5/2010	11:08:45	-0.09	97.07	0.81	11.72	31.28
run3	10/5/2010	11:09:00	-0.09	261.95	5.38	49.89	30.52
run3	10/5/2010	11:09:15	-0.10	37.79	23.50	77.88	36.10
run3	10/5/2010	11:09:30	-0.10	26.60	12.61	77.88	53.47
run3	10/5/2010	11:09:45	-0.10	25.33	2.58	47.27	53.47

run3	10/5/2010	11:10:00	-0.09	22.98	1.44	43.28	44.78					
run3	10/5/2010	11:10:15	-0.10	57.26	0.98	53.58	38.09					
run3	10/5/2010	11:10:30	-0.10	376.82	3.16	86.91	38.09					
run3	10/5/2010	11:10:45	-0.10	458.79	22.56	86.91	95.77					
run3	10/5/2010	11:11:00	-0.09	207.49	13.10	86.39	101.32					
run3	10/5/2010	11:11:15	-0.09	394.24	20.75	85.94	97.62					
run3	10/5/2010	11:11:30	-0.10	174.09	14.06	85.94	84.41					
run3	10/5/2010	11:11:45	-0.10	227.87	16.53	57.31	84.44					
run3	10/5/2010	11:12:00	-0.10	647.82	15.44	54.20	83.98					
run3	10/5/2010	11:12:15	-0.10	149.54	43.10	54.61	83.74					
run3	10/5/2010	11:12:30	-0.10	62.47	33.55	55.91	83.74					
run3	10/5/2010	11:12:45	-0.10	106.12	9.23	55.91	72.77					
run3	10/5/2010	11:13:00	-0.10	382.94	4.36	63.51	71.29					
run3	10/5/2010	11:13:30	-0.10	133.37	34.04	69.58	57.55					
run3	10/5/2010	11:13:45	-0.10	29.43	8.43	69.58	25.41					
run3	10/5/2010	11:14:00	-0.10	92.19	2.48	47.87	25.41					
run3	10/5/2010	11:14:15	-0.10	326.50	5.18	47.36	47.20					
run3	10/5/2010	11:14:30	-0.10	45.93	7.58	50.15	59.08					
run3	10/5/2010	11:14:45	-0.10	140.14	6.54	56.15	59.08					
run3	10/5/2010	11:15:00	-0.10	25.59	19.11	56.15	34.59					
run3	10/5/2010	11:15:15	-0.10	123.60	2.96	58.66	33.69					
run3	10/5/2010	11:15:30	-0.10	188.38	2.80	60.09	43.59					
run3	10/5/2010	11:15:45	-0.09	205.96	8.39	60.06	65.92					
run3	10/5/2010	11:16:00	-0.07	82.45	7.26	64.14	65.92					
run3	10/5/2010	11:16:15	0.86	114.62	16.00	64.21	62.71					
averun3	10/5/2010	10:14:45	-0.09	140.28	9.73	34.78	34.12	60				
scg3	10/5/2010	11:16:30	3.71	29.30	20.14	49.59	60.79	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	11:16:45	3.85	32.13	5.67	15.14	60.79	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	11:17:00	7.58	44.04	0.89	15.14	19.74	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	11:17:15	9.64	10.35	0.10	7.75	18.56	CC67301/cg3	O2	9.976		0
scg3	10/5/2010	11:17:30	9.66	11.10	0.07	3.66	13.41	CC67301/cg3	O2	9.976		0
o2span1	10/5/2010	11:17:15	9.64	10.35	0.10	7.75	18.56	CC67301/cg3	O2	9.976		0
cozero1	10/5/2010	11:17:15	9.64	10.35	0.10	7.75	18.56	CC67301/cg3	O2	9.976		0
noxzero1	10/5/2010	11:17:15	9.64	10.35	0.10	7.75	18.56	CC67301/cg3	O2	9.976		0
sdg6	10/5/2010	11:17:45	9.68	11.52	0.05	3.66	2.41	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	11:18:00	9.65	11.75	0.05	2.04	2.38	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	11:18:15	1.55	149.51	16.24	1.95	2.12	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	11:18:30	0.03	202.05	36.16	3.61	1.95	SG9151612BAL/dg6	NOx	37.58	CO	194.52
sdg6	10/5/2010	11:18:45	0.00	202.67	36.79	7.32	1.95	SG9151612BAL/dg6	NOx	37.58	CO	194.52
o2zero1	10/5/2010	11:18:45	0.00	202.67	36.79	7.32	1.95	SG9151612BAL/dg6	NOx	37.58	CO	194.52
cospan1	10/5/2010	11:18:45	0.00	202.67	36.79	7.32	1.95	SG9151612BAL/dg6	NOx	37.58	CO	194.52
noxspan1	10/5/2010	11:18:45	0.00	202.67	36.79	7.32	1.95	SG9151612BAL/dg6	NOx	37.58	CO	194.52
scg2	10/5/2010	11:19:00	-0.02	203.09	37.11	7.32	2.41	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	11:19:15	-0.01	203.09	37.33	7.16	2.44	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	11:19:30	13.56	104.04	29.11	7.08	1.90	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	11:19:45	20.49	13.64	1.20	7.08	0.70	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	11:20:00	20.57	12.76	0.31	1.53	0.73	CC274805/cg2	O2	20.98		0
scg2	10/5/2010	11:20:15	20.59	12.27	0.20	1.30	0.90	CC274805/cg2	O2	20.98		0
thczero1	10/5/2010	11:20:15	20.59	12.27	0.20	1.30	0.90	CC274805/cg2	O2	20.98		0
scg5	10/5/2010	11:20:30	20.61	12.21	0.14	1.20	0.98	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:20:45	20.55	12.57	0.13	0.98	0.98	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:21:00	4.71	11.75	0.26	0.98	1.30	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:21:15	0.12	11.23	0.10	184.96	1.38	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:21:30	0.04	11.17	0.08	294.19	1.38	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:21:45	0.01	11.07	0.05	294.19	1.38	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:22:00	0.00	10.97	0.05	405.11	1.40	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:22:15	-0.02	10.45	0.05	407.72	2.00	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:22:30	-0.03	10.25	0.05	438.14	2.44	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:22:45	-0.03	10.35	0.05	462.83	2.41	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:23:00	-0.04	10.35	0.05	462.83	2.67	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:23:15	-0.04	10.25	0.05	466.94	2.69	CC81292/cg5	THC	477.2		0
scg5	10/5/2010	11:23:30	-0.05	10.25	0.05	467.28	2.46	CC81292/cg5	THC	477.2		0
thcspan1	10/5/2010	11:20:45	20.55	12.57	0.13	467.28	2.46	CC81292/cg5	THC	477.2		0

MidCon COMPRESSION

Moisture Sampling Data Worksheet

Run Number 1
Client Name [illegible]
Source Name Perkins
Source Location Tarrant County, TX
Unit Number MC 2264
Operator Steven Bornsen

Date 10-5-10
Ambient Temperature 52 °F
Barometric Pressure (P_b) 28.69 "Hg
Dry Gas Meter ID 1901520
Barometer ID –
Initial Leak check @ 1.0 "Hg = 0.000 cfm
Final Leak check @ 6.0 "Hg = 0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
0155	0.000	1.30	252	4.0	52	58
0200	1.96	1.20	251	4.0	51	60
0205	3.90	1.20	251	4.0	51	61
0210	5.87	1.20	251	4.0	51	62
0215	7.84	1.20	251	4.0	51	62
0220	9.80	1.20	251	4.0	51	63
0225	11.75	1.20	250	4.0	51	63
0230	13.71	1.20	250	4.0	51	64
0235	15.69	1.20	250	4.0	51	64
0240	17.66	1.20	250	4.0	51	65
0245	19.62	1.20	251	4.0	52	65
0250	21.59	1.20	251	4.0	52	66
0255	23.66					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	689.0	690.1 70.5	613.5	536.7
Final	794.2	721.5	614.6	602.0
Diff.	105.2	19.0	1.1	53

Volume Sampled (V_m) = 23.665
Total Impinger Weight (V_{lc}) = 120.6
Avg. Meter Temp. (T_m) = 63
Avg ΔH = 1.20
Dry Gas Meter Cal Factor (Y) = 1.032

$$V_{msstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} = \frac{24.533}{0.405} \text{ sft}^3 \text{ scfm}$$

$$V_{wstd} = 0.04706 \times V_{lc} = 6.146 \text{ sft}^3$$

$$B_{ws} = \frac{V_{wstd}}{V_{msstd} + V_{wstd}} = 20.03 \%$$

MidCon COMPRESSION

Moisture Sampling Data Worksheet

Run Number	2	Date	10-5-10
Client Name	Texas Midstream Gas Service	Ambient Temperature	59 °F
Source Name	Ponder CS	Barometric Pressure (P_b)	29.69 "Hg
Source Location	Denton County, TX	Dry Gas Meter ID	1901520
Unit Number	182009	Barometer ID	—
Operator	Steven Bornsen	Initial Leak check @ 10.0 "Hg =	0.000 cfm
		Final Leak check @ 15.0 "Hg =	0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
0906	0.000	1.20	246	4.0	54	70
0911	1.97	1.20	245	4.0	54	70
0916	3.94	1.20	244	4.0	53	71
0921	5.92	1.20	243	4.0	53	71
0926	7.90	1.20	243	4.0	53	72
0931	9.86	1.20	242	4.0	54	72
0936	11.83	1.20	242	4.0	54	73
0941	13.80	1.20	242	4.0	54	74
0946	15.78	1.20	242	4.0	55	75
0951	17.76	1.20	242	4.0	55	75
0956	19.74	1.20	242	4.0	55	76
1001	21.71	1.20	243	4.0	56	77
1006	23.681					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	794.2	721.5	614.6	862.0
Final	901.1	732.7	615.7	869.4
Diff	106.9	11.2	1.1	7.4

Volume Sampled (V_m) = 23.681 Total Impinger Weight (V_w) = 126.6

Avg. Meter Temp. (T_m) = 73 Avg. ΔH = 1.20

Dry Gas Meter Cal Factor (Y) = 1.032

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} =$$

24.085 sft^3

0.401 scfm

$$V_{wstd} = 0.04706 \times V_w =$$ 5.958 sft^3

$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}} =$$ 19.83 %

MidCon COMPRESSION

Moisture Sampling Data Worksheet

Run Number	3	Date	10-5-10
Client Name	[illegible]	Ambient Temperature	61 °F
Source Name	[illegible]	Barometric Pressure (P_b)	29.69 "Hg
Source Location	Denton County, TX	Dry Gas Meter ID	1901520
Unit Number	ME1209	Barometer ID	—
Operator	Steven Bomsen	Initial Leak check @ 10.0 "Hg =	0.000 cfm
		Final Leak check @ 15.0 "Hg =	0.000 cfm

Time	Meter Reading	ΔH ("H_2O)	Heated Line Temp. (°F)	Pump Vacuum ("Hg)	Effluent Temp. (°F)	Meter Temp. (°F)
1015	0.000	1.20	247	4.0	62	76
1020	1.96	1.20	247	4.0	54	76
1025	3.92	1.20	247	4.0	52	76
1030	5.89	1.20	247	4.0	52	76
1035	7.87	1.20	247	4.0	52	76
1040	9.84	1.20	246	4.0	51	76
1045	11.82	1.20	246	4.0	51	76
1050	13.80	1.20	246	4.0	51	76
1055	15.75	1.20	246	4.0	51	77
1100	17.77	1.20	246	4.0	52	77
1105	19.76	1.20	246	4.0	52	77
1110	21.74	1.20	246	4.0	52	77
1115	23.700					

	Impinger 1	Impinger 2	Impinger 3	Impinger 4
Initial	901.1	732.7	615.7	869.4
Final	1012.6	745.7	625.2	877.8
Diff.	111.5	13.0	9.5	8.4

Volume Sampled (V_m) = 23.700 Total Impinger Weight (V_w) = 142.4

Avg. Meter Temp. (T_m) = 76 Avg. ΔH = 1.20

Dry Gas Meter Cal Factor (Y) = 1.002

$$V_{mstd} = 17.64 \times V_m \times Y \times \frac{P_b + \frac{\Delta H}{13.6}}{T_m + 460} = \underline{23.970}\ \text{sft}^3 \quad \underline{0.399}\ \text{scfm}$$

$$V_{wstd} = 0.04706 \times V_w = \underline{6.701}\ \text{sft}^3$$

$$B_{ws} = \frac{V_{wstd}}{V_{wstd} + V_{mstd}} = \underline{21.85}\ \%$$

Appendix D. Calibration of Field Test Equipment

MidCon COMPRESSION

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

Calibration Certificate No. 1750.01

Cert. No.: 4199-3021033

Traceable® Certificate of Calibration for Dial Barometer

Instrument Identification:

Model: 4199 S/N: 101794726 Manufacturer: Control Company

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Digital Barometer	D4540001	12/11/10	1000270704

Certificate Information:

Technician: 57 Procedure: CAL-33 Cal Date: 7/07/10 Cal Due: 7/07/12

Test Conditions: 22.0°C 46.0 %RH 1014 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
mbar		N.A.		959.60	960	Y	955	965	0.61	>4:1
mbar		N.A.		985.40	986	Y	980	990	0.61	>4.1
mbar		N.A.		1,012.20	1,011	Y	1,007	1,017	0.61	>4:1

This instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min = Nominal(Rounded) - Tolerance; Max = Nominal(Rounded) + Tolerance; Date=MM/DD/YY

Nicol Rodriguez, Quality Manager

Wallace Berry, Technical Manager

Maintaining Accuracy:

In our opinion does calibrated your Dial Barometer should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Dial Barometers change little, if any at all, but can be affected by aging, temperature shock, and contamination.

Recalibration:

For factory calibration and recertification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Control Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01
Control Company is ISO 9001:2008 Quality Certified by (DNV) Det Norske Veritas, Certificate No. CERT-01805-2008-AQ-HOU-ANAB
International Laboratory Accreditation Cooperation (ILAC) - Mutual Recognition Arrangement (MRA)

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Digital Temperature Indicator (DTI) Calibration

DTI ID 1901520

Reference Method Thermometer SN 91209682

Date 7/21/10

	Reference Thermometer (°F)	DTI Reading (°F)	Difference*
Ambient Temperature	84	84	0
Ice Bath	32	32	0
Boiling Water	210	210	0

* All readings must agree within 1° F of the Reference Method for those temperatures less that 70 F and within 1.5% for temperatures above 70° F.

James Mode
Signature of Calibrator

MidCon COMPRESSION

METHOD 5 DRY GAS METER PRE-TEST CALIBRATION USING CRITICAL ORIFICES

1) Select 3 to 5 critical orifices to calibrate the dry gas meter which bracket the expected operating range during testing
2) Warm-up dry gas meter for a minimum of 15 minutes
3) Record barometric pressure before and after calibration procedure
4) Run at tested vacuum (from Orifice Calibration Report) for a period of time necessary to achieve a minimum total volume of 3 cubic feet
5) Record data and information in the [illegible] cells. YELLOW cells are calculated
6) If a [illegible] cell appears, the results are outside of allowable calibration standards

PRE-TEST CALIBRATION

DATE: 7/26/2018
CALIBRATOR: [illegible]
METER ID: 10918.20
CRITICAL ORIFICE SET SERIAL #: DA 40-73
BAROMETRIC PRESSURE (in Hg): INITIAL 29.56, FINAL 29.56, AVG (P_{bar}) 29.56

ORIFICE #	RUN #	Kʼ FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (ft³) INITIAL	DGM READINGS (ft³) FINAL	DGM READINGS (ft³) NET (V_m)	TEMPERATURES °F AMBIENT	TEMPERATURES °F DGM INLET INITIAL	TEMPERATURES °F DGM INLET FINAL	TEMPERATURES °F DGM OUTLET INITIAL	TEMPERATURES °F DGM OUTLET FINAL	TEMPERATURES °F DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_w (STD)	(3) Y	Y % Dif to Average Y	Y % Dif with other orifices	$\Delta H_@$
DA-40	1	0.2220	16.0	6.200	6.206	6.206	90	93	93	93	93	93	10.00	0.90	5.8972	5.2246	1.031			3.85
	2	0.2232	14.0	6.206	6.249	6.249	90	93	93	93	93	93	10.00	1.00	5.9268	5.2508	1.024			3.85
																	AVG =	1.028	-0.41	-0.28	
DA-48	1	0.2370	13.5	6.249	6.290	6.290	90	93	93	93	93	93	13.00	1.00	5.9473	5.2746	1.024			3.85
	2	0.2370	11.5	6.290	6.331	6.331	90	93	93	93	93	93	13.00	1.00	5.9698	5.2937	1.027			3.85
																	AVG =	1.026	-0.09	-0.26	
DA-55	1	0.4452	13.0	6.331	6.721	6.721	89	92	94	93	94	94	10.00	1.30	5.9277	5.2719	1.033			3.18
	2	0.4452	12.0	6.721	7.121	7.121	90	94	94	94	94	94	10.00	1.30	5.9548	5.2979	1.033			3.18
																	AVG =	1.033	0.00	0.32	
DA-63	1	0.3708	10.0	6.800	6.849	6.849	87	92	93	92	93	93	7.00	1.00	5.9731	5.2943	1.033			1.83
	2	0.3708	10.0	6.849	6.898	6.898	89	95	94	93	94	94	7.00	1.00	5.9999	5.3181	1.033			1.83
																	AVG =	1.033	0.00	0.00	
DA-73	1																			
	2																			
																	AVG =				

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.032

AVERAGE $\Delta H_@$ = 2.71

POST-TEST CALIBRATION CHECK

METHOD 5 DRY GAS METER POST-TEST CALIBRATION CHECK

1) Select 2 critical orifices to bracket the operating range during testing
2) Record barometric pressure before and after calibration procedure
3) Run at tested vacuum (from Orifice Calibration Report) for a period of time greater than 5 minutes
4) Record data and information in the [illegible] cells. YELLOW cells are calculated
5) If a [illegible] cell appears, the results are outside of allowable calibration standards

DATE: 10/23/2018
CALIBRATOR: S. Bertram
METER ID: 10918.20
CRITICAL ORIFICE SET SERIAL #: DA 40-73
BAROMETRIC PRESSURE (in Hg): INITIAL 29.58, FINAL 29.58, AVG (P_{bar}) 29.58

ORIFICE #	RUN #	Kʼ FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (ft³) INITIAL	DGM READINGS (ft³) FINAL	DGM READINGS (ft³) NET (V_m)	TEMPERATURES °F AMBIENT	TEMPERATURES °F DGM INLET INITIAL	TEMPERATURES °F DGM INLET FINAL	TEMPERATURES °F DGM OUTLET INITIAL	TEMPERATURES °F DGM OUTLET FINAL	TEMPERATURES °F DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_w (STD)	(3) Y	Y % Dif to Average Y	Y % Dif with other orifices	$\Delta H_@$
DA-63	1	0.3708	10.0	0.000	0.057	0.057	75	79	80	79	80	80	7.00	1.00	5.9512	5.2934	1.030			1.84
	2	0.3708	10.0	6.800	7.357	7.357	74	80	81	80	81	81	10.00	1.30	2.1718	7.5149	1.045			1.83
																	AVG =	1.044	0.31	1.84	
DA-48	1	0.2370	11.0	0.057	3.466	3.466	75	78	78	78	78	78	7.00	0.90	2.1719	3.7518	1.027			2.83
	2	0.2370	10.0	6.800	2.891	2.891	74	78	78	78	78	78	6.00	0.80	2.5164	2.5816	1.026			2.83
																	AVG =	1.026	-0.01	-1.91	

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.038

AVERAGE $\Delta H_@$ = 2.32

MidCon COMPRESSION

Horiba Instruments
5900 Hines Drive
Ann Arbor, MI 48108

Certificate of Calibration

Certificate Number: D00099DN-072610

The calibration was performed using reference standards which have traceability to the International System of Units (SI) through the United States National Institute of Standards and Technology (NIST). The calibration was performed using the procedure number stated below.

Customer: Ranger Analytics, Inc.
Customer Address: 603 FM 1092, STE E-7
Stafford, TX 77477

Manufacturer: STEC
Description: Gas Divider
Condition Received: See attached
Cal Procedure: WI-QM-B-010
Date Calibrated: 07/26/10
Calibration Gas: Zero N_2

Part Number: SGD-710C
Serial Number: D00099DN
Condition Returned: Passed
Uncertainty: +/- 0.0481 L/min 07/26/11
Recomm. Recalibration Due: ~~07/26/10~~
Lot Number: 32-112069904-1

Standards Traceability

Mfr./Model Number	Serial #	Test Number	Cal. Date	Due Date
DHI/3E5	1015	LAB144B	04/08/10	04/08/11
DHI/3E5	1016	LAB144B	04/08/10	04/08/11
DHI/Molbox 1A	448	LAB145B	04/05/10	04/05/11

Service Technician: _____ **Date:** 07/26/10

QA Manager: _____ **Date:** 07/26/10

This certificate/report may not be reproduced, except in full, without the written approval of Horiba. The calibrated system is operating within the specification. The recommended calibration cycle implies system usage in normal, non extreme, environmental conditions. The uncertainty is calculated at a 95% confidence interval with a coverage factor of k=2.

This certificate is issued under the authority of: Horiba Instruments, 2690 John R Road, Troy, MI 48083

F-QM-105
Revision Date: N/A

Issue Date: 2/6/2010
Revision Level: A
Page 1 of 2

MidCon COMPRESSION

NMHC Measurement Performance Data

Date of Calibration: 9/23/2010

Next Calibration Due: 3/26/2011

Analyzer Make: California Analytical Instruments

Calibration Parameters: Propane as C

Analyzer Model: 600M-HFID

Fuel: 40% H2/60% He

Analyzer Serial Number: W05005

Methane Cutter Temp (°C): 323.1

Calibration Gases Used

	C, Value	Cylinder Serial Number
Nitrogen	0.0	ALM061181
Propane	1431.6	CC81292
Ethane	1007.0	CC122420
Methane	515.4	CC212360

Calibration Values

	Value	THC	CH_4
Nitrogen	0.0	5.3	1.8
Propane	1431.6	1430.0	2.6

Response Factor Data

Run1	Ethane	1007.0	1023.9	73.2
	Methane	515.4	756.7	713.8
Run 2	Ethane	1007.0	1017.8	73.6
	Methane	515.4	755.6	714.1
Run 3	Ethane	1007.0	1023.1	73.0
	Methane	515.4	755.5	714.8
Averages	Ethane	1007.0	1021.6	73.3
	Methane	515.4	755.9	714.2

Results

RF_{CH4}	PF_{C2H6}	PF_{CH4}
1.45667	0.07177	0.94478

Person performing calibration: Steven Bonsson

Appendix E. Calibration Gas Cylinder Certifications

Air Liquide America Specialty Gases LLC | Scott

Shipped From: 1290 COMBERMERE STREET
TROY MI 48083
Phone: 248-589-2950 Fax: 248-589-2134

C E R T I F I C A T E O F A N A L Y S I S

AIR LIQUIDE AMERICA L.P.
PURE STOCK
801 W NORTH CARRIER PKWY
GRAND PRAIRIE TX 75050-1003

PROJECT #: 05-81719-001
PO#: PURE STOCK
ITEM #: 0501841 AL
DATE: 22Oct2009

CYLINDER #: ALM061181
FILL PRESSURE: 02000 PSIG
PRODUCT EXPIRATION: 21Oct2012

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	< 0.1 PPM
NOX	0.1 PPM	< 0.1 PPM
CO	0.5 PPM	< 0.5 PPM
CO2	1 PPM	< 1 PPM
THC	0.1 PPM	< 0.1 PPM
H2O	2 PPM	< 2 PPM
O2	0.5 PPM	< 0.5 PPM

QC BATCH : NITFILL102209

ANALYST: SAJAD HYDER

MidCon COMPRESSION

Airgas

Airgas Specialty Gases
10/5 Cracker Drive
Port Allen, LA 70767
225.388.0900
FAX: 225.388.0559
www.airgas.com

CERTIFICATE OF ANALYSIS

AIR - CEM-CAL ZERO

Part Number:	Al CZ15A	Reference Number:	83-124225958-1
Cylinder Analyzed:	CC274805	Cylinder Volume:	146 Cubic Feet
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2000 PSIG
Analysis Date:	Jul 08, 2010	Valve Outlet:	590
Lot #:	83-124225958-1		

Expiration Date: Jul 08, 2015

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
Carbon Dioxide	<1 PPM	<.1 PPM
NOx	<0.1 PPM	<.1 PPM
Sulfur Dioxide	<0.1 PPM	<.1 PPM
THC	<0.1 PPM	<.1 PPM
Percent Oxygen	20-21 %	20.98 %
Moisture	<2 PPM	.921 PPM
Carbon Monoxide	<0.5 PPM	<.1 PPM

Permanent Notes:

A calibration gas certified by the gas vendor not to contain concentrations of SO2, NOx, or total hydrocarbons above 0.1 parts per million (ppm), a concentration of CO above 1ppm, or a concentration of CO2 above 400ppm.

Notes:

Meets Federal Register specifications Title 40 C.F.R. 72.2

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Jean Hardin

Approved for Release

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number	E02NI90E15A0228	Reference Number:	83-124229767-1
Cylinder Number:	CC67301	Cylinder Volume:	145 Cu.Ft
Laboratory	ASG - Port Allen - LA	Cylinder Pressure:	2015 PSIG
Analysis Date:	Aug 10, 2010	Valve Outlet	590

Expiration Date: Aug 10, 2013

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
OXYGEN	10.00 %	9.976 %	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	00040210	CC108973	10.00% OXYGEN/NITROGEN	Oct 02, 2011

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
HO2GH	PMO2	Jul 22, 2010

Triad Data Available Upon Request

Notes

Signature on file

QA Approval

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number	E03NI99E15A41A3	Reference Number	83-124230820-5
Cylinder Number	SG9151612BAL	Cylinder Volume	144 Cu.Ft
Laboratory	ASG - Port Allen - LA	Cylinder Pressure	2015 PSIG
Analysis Date	Aug 26, 2010	Valve Outlet	660

Expiration Date: Aug 26, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITRIC OXIDE	190.0 PPM	187.9 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	950.0 PPM	972.6 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			
Total oxides of nitrogen		188.6 PPM		For Reference Only

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	08060437	CC255856	1002.4PPM CARBON MONOXIDE/NITROGEN	May 15, 2012
NTRM	040602	CC266636	250.6PPM NITRIC OXIDE/NITROGEN	Feb 01, 2011

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIRMCO	FTIR	Jul 31, 2010
FTIRMNO	FTIR	Aug 05, 2010

Triad Data Available Upon Request

Notes:

Signature on file

QA Approval

MidCon COMPRESSION

Airgas

Airgas Specialty Gases
1075 Clydare Drive
Port Allen, LA 70767
225.368.0500
FAX 225.368.0958
www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E80A41A5	Reference Number:	83-124226012-4
Cylinder Number:	LL5662	Cylinder Volume:	83 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2215 PSIG
Analysis Date:	Jul 21, 2010	Valve Outlet:	660

Expiration Date: Jul 21, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITRIC OXIDE	95.00 PPM	93.63 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	450.0 PPM	484.9 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

Total oxides of nitrogen 93.63 PPM For Reference Only

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	09060813	CC266516	94.26PPM NITRIC OXIDE/NITROGEN	Mar 15, 2011
NTRM	09060423	CC266598	501.3PPM CARBON MONOXIDE/NITROGEN	Feb 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR2MCO	FTIR	Jul 09, 2010
FTIR2MNO	FTIR	Jun 24, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

Page 1 of 83-124226012-4

MidCon COMPRESSION

Airgas

Airgas Specialty Gases
630 United Drive
Durham, NC 27713
Phone (919) 544-3773
Fax (919) 544-3774
www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E02AI99E60A60T4	Reference Number:	122-124225959-1
Cylinder Number:	LL87086	Cylinder Volume:	85 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2214 PSIG
Analysis Date:	Jul 20, 2010	Valve Outlet:	660

Expiration Date: Jan 20, 2011

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITROGEN DIOXIDE	60.00 PPM	49.91 PPM	G1	+/- 2% NIST Traceable
Air	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
GMIS	GMIS	CC275018	60.38PPM NITROGEN DIOXIDE/NITROGEN	May 11, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
ECO Physics NOX (0-5000 ppm)	Chemiluminescence	Jul 01, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

#5000

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E02NI99E15A0932	Reference Number:	83-124229870-2
Cylinder Number:	CC81292	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2015 PSIG
Analysis Date:	Aug 11, 2010	Valve Outlet:	350

Expiration Date: Aug 11, 2013

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
PROPANE	500.0 PPM	477.2 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	000519	SG9103755BAL	483.6PPM PROPANE/NITROGEN	Jul 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR2PROPANE (50-500 ppm)	FTIR	Aug 05, 2010

Triad Data Available Upon Request

Notes:

Signature on file

QA Approval

MidCon COMPRESSION

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Airgas Specialty Gases
1675 Cinclare Drive
Port Allen, LA 70767
225.388.0600
FAX: 225.383.0869
www.airgas.com

Part Number:	E02NI99E80A0477	Reference Number:	83-124229767-4
Cylinder Number:	LL45443	Cylinder Volume:	83 Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	2215 PSIG
Analysis Date:	Aug 09, 2010	Valve Outlet:	350

Expiration Date: Aug 09, 2013

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
PROPANE	850.0 PPM	831.0 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	01050608	SG9133879BAL	985.9PPM PROPANE/NITROGEN	May 05, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR2PROPANE (500-5000 PPM)	FTIR	Jul 19, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

MidCon COMPRESSION

Airgas

Airgas Specialty Gases
1075 Claiborne Drive
Port Allen, LA 70767
225.388.8900
FAX: 225.388.0958
www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E02NI99E80A2826	Reference Number:	83-124224075-4
Cylinder Number:	LL16832	Cylinder Volume:	Cu.Ft.
Laboratory:	ASG - Port Allen - LA	Cylinder Pressure:	
Analysis Date:	Jun 24, 2010	Valve Outlet:	350

Expiration Date: Jun 24, 2013

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 180 psig i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
PROPANE	300.0 PPM	303.1 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	000519	SG9103765BAL	483.6PPM PROPANE/NITROGEN	Jul 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR2PROPANE (50-500 ppm)	FTIR	Jun 03, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

Appendix F. Engine Operational Data

SUMMARY OF UNIT OPERATING DATA

Job Name: Texas Midstream Gas Services — Date: 10/5/10

Job Location: Ponder Compressor Station — Operator: Mr. Steve Bornsen

Serial No : C-17694/1 — Unit: MC2209

TEST RUN NO.	1	2	3
Observation Time:	0813	0913	1022
AMBIENT CONDITIONS:			
Ambient Temp (°F)	53	59	64
Barometric Press. ("Hg)	29.69	29.69	29.69
Elevation (Ft.)	668		
ENGINE OPERATIONAL DATA:			
Speed (RPM)	1151	1152	1152
Rated Speed (RPM)	1200		
Manifold Pressure ("Hg / PSIA)	32.0	32.0	32.0
Intake Manifold Temperature (°F)	111	113	113
Fuel Header Pressure (psi)	24.0	24.0	24.0
Rated Engine Horsepower (BHP)	1380		
Calculated Engine Horsepower (BHP)	1057	1053	1053
Percent Load	76.6%	76.3%	76.3%
Fuel Rate (SCFH)	8750	8750	8708
Brake Specific Fuel Consumption (btu/bhp-hr)	7601	7630	7593
Exhaust Flow Rate (DSCFH)	76625	76625	76257
Exhaust Temperature (°F)			
Pre-Converter Temperature (°F)			
Oxygen Sensor (mV)			
COMPRESSOR OPERATIONAL DATA:			
Suction Pressure (PSIG)	740	740	740
Suction Temperature (°F)	68	70	72
Final Discharge Pressure (PSIG)	985	985	985
Final Discharge Temperature (°F)	88	92	94
Compressor Volume (MMSCFD)	20500	20500	20500
WKI Number	88	88	88

MidCon COMPRESSION

SUMMARY OF UNIT OPERATING DATA

Job Name: Town Midstream Gas Service Date: 10-5-10

Job Location: Pinder CS Operator: Steven Bornsen

Serial No.: C-17694/1 Unit: MC2209

TEST RUN NO.	1	2	3	4	5
Observation Time:	0813	0913	1022		
AMBIENT CONDITIONS:					
Ambient Temp (°F)	53	59	64		
Barometric Press. ("Hg)	29.69	29.69	29.69		
Elevation (Ft.)	668'				
ENGINE OPERATIONAL DATA:					
Speed (RPM)	1151	1152	1152		
Rated Speed (RPM)	1200				
Manifold Pressure ("HG/PSIA)	32.0	32.0	32.0		
Intake Manifold Temperature (°F)	111	113	113		
Fuel Header Pressure (psi)	24.0	24.0	24.0		
Rated Engine Horsepower (BHP)	1380				
Calculated Engine Horsepower (BHP)	1057	1053	1053		
Percent Load	8750	8750	8708		
Fuel Rate (SCFH)	210	210	209		
Brake Specific Fuel Consumption (btu/bhp-hr)					
Exhaust Flow Rate (DSCFH)					
Exhaust Temperature (°F)					
Pre-Converter Temperature (°F)					
Oxygen Sensor (mV)					
COMPRESSOR OPERATIONAL DATA:					
Suction Pressure (PSIG)	740	740	740		
Suction Temperature (°F)	68	70	72		
Final Discharge Pressure (PSIG)	~~1000~~ 985	985	985		
Final Discharge Temperature (°F)	88	92	94		
Compressor Volume (MMSCFD)	20,500	20,500	20,500		
WKI Number	88	88	88		
Timing	29°	29°	29°		
	75%	75%	75%		

DRESSER
Waukesha

Waukesha Engine
BHP / IMP Prediction
VHP Series Four

Customer: Texas Midstream Gas Services
Project: Ponder CS
Engine Information: MC2209
Calculated By: S. Bornsen
Date Performed: 5-Oct-10
Additional Notes:

Calculate: ◉ BHP ○ IMP

Select Engine Model: L5794GSI

Required Inputs:	L5794GSI	Engine/Site Values	Multiplier	Resultant
IMP ("HG gauge) x Engine Speed(rpm)		2658.81	0.0351	93.324231
Intake Manifold Temperature (°F)		111	-2.195	-243.645
Engine Speed (RPM)		1151	0.526	605.426
Ignition Timing (°BTDC)		29	8.389	243.281
Waukesha Knock IndexTM (WKITM)		88	-2.055	-180.84
Exhaust Oxygen (dry volume %)		0.01	-43.65	-0.4365
Barometer ("Hg)		29.69	49.03	1455.7007
Intercept		1	-915.8	-915.8

Calculated Bhp	1057
Calculated kW_b	788
Calculated BMEP (psi)	125.7
Calculated BMEP (bar)	8.7

Based on the following data ranges: (Reference Service Bulletin 14-2755B or latest revision)

50 – 173 psi BMEP
115 – 143 F Intake Manifold Temperature
181 – 242 F Jacket Water Outlet Temperature
37 – 94 WKI™
700 – 1200 RPM Engine Speed
12 – 27° BTDC Ignition Timing
0 16 – 1 56% (Dry) Exhaust Oxygen for GSI's
7 5 – 8 2% (Dry) Exhaust Oxygen for LT's

** Accuracy is ±5% on power, and ±2 inHG for intake manifold pressure
** The above calculation is intended as a guide for estimating average horsepower or intake manifold pressure for a VHP-GSI, GL Series Four engine

Appendix G. Fuel Analysis and F_d Calculations

MidCon COMPRESSION

IPL

CERTIFICATE OF ANALYSIS

Number : 2010070107-001A

2440 Chambers Street, Suite A
Venus, TX 76084
817-539-2168 (O)
817-539-2170 (F)

Chesapeake Energy Marketing, Inc.
Terry Harris
5601 East 1st Street

Fort Worth, Texas 76103

Field:	Barnett Shale	Report Date:	07/21/10
Station:	Ponder ETC Check	Sample Of:	Spot - Natural Gas
Location:	8017400337	Sample Date:	07/19/2010
Sample Point:		Sample Conditions:	915 psi ,116° F
Cylinder # :	15267	PO / Ref. No.:	

Comments:
h2s 3 ppm

Analytical Data

Components	Mol %	Wt%	GPM at 14.730 psia	Method	Lab Tech.	Date Analyzed
				GPA-2286 (MC10)		07/20/10
N2	0.3990	0.6424				
METHANE	93.4491	86.1370				
CO2	2.4720	6.2509				
ETHANE	3.1381	5.4218	0.8387			
PROPANE	0.3920	0.9935	0.1079			
I-BUTANE	0.0540	0.1804	0.0177			
N-BUTANE	0.0540	0.1804	0.0170			
I-PENTANE	0.0150	0.0621	0.0055			
N-PENTANE	0.0090	0.0373	0.0033			
HEXANES PLUS	0.0178	0.0942	0.0073			
TOTALS	100.0000	100.0000	0.9974			

CALCULATED VALUES	TOTAL	C6+	C7+
MOLECULAR WEIGHT	17.404	91.124	96.814
REAL DRY BTU AT 14.696 PSIA, 60 °F	1019.20	4928.30	5139.80
REAL WET BTU AT 14.696 PSIA, 60 °F	1002.30	4843.40	5051.20
RELATIVE DENSITY	0.6019	3.1466	3.3431

	TOTAL	C2+	IC5+
GPM's AT 14.696 PSIA, 60 °F	0.9974	0.9974	0.0161

COMPRESSIBILITY FACTOR 0.9978

Hydrocarbon Laboratory Manager

MidCon COMPRESSION

FUEL GAS HEATING VALUE CALCULATIONS

Fuel Gas Analysis							
Component ID	Mole % Yi*100	MW	LHV BTU/FT^3	LHV*Yi BTU/FT^3	MW*Yi	HHV BTU/FT^3	HHV*Yi BTU/FT^3
Methane	93.4491	16.043	913.0	853.190	14.992	1010.0	943.836
Ethane	3.1381	30.070	1624.0	50.963	0.944	1769.6	55.532
Ethene		28.054	1499.1	0.000	0.000		
Propane	0.3920	44.097	2322.0	9.102	0.173	2516.1	9.863
Propene		42.081	2182.1	0.000	0.000		
I-Butane	0.0540	58.123	3010.0	1.625	0.031	3251.9	1.756
N-Butane	0.0540	58.123	3020.0	1.631	0.031	3262.3	1.762
I-Pentane	0.0150	72.150	3718.0	0.558	0.011	4000.9	0.600
N-Pentane	0.0090	72.150	3706.8	0.334	0.006	4008.9	0.361
N-Hexane	0.0178	86.177	4403.9	0.784	0.015	4755.9	0.847
N-Heptane		100.204	5100.3	0.000	0.000	5502.5	0.000
Nitrogen	0.3990	28.013	0.0	0.000	0.112		
Oxygen		31.999	0.0	0.000	0.000		
Helium		4.003	0.0	0.000	0.000		
Carbon Dioxide	2.4720	44.010	0.0	0.000	1.088		
Carbon Monoxide		28.010	320.5	0.000	0.000		
Hydrogen		2.016	273.8	0.000	0.000		
Hydrgen Sulfide		34.082	586.7	0.000	0.000		
Water Vapor		18.015	0.0	0.000	0.000		
Total	100.0000	@60°F., 14.65 psia LHV Dry btu/ft^3		918.19	Average MW 17.40	HHV	1014.556

Notes

Carbon Mole Weight =	12.01115
Hydrogen Mole Weight =	1.00797
Oxygen Mole Weight =	15.99940
Nitrogen Mole Weight =	14.00670

FUEL GAS HEATING VALUE CALCULATIONS

Component	(1) Mol. % Volume	(2) Mol Weight	(3) Fuel Fraction Mol. Wt.	(4) Weight %	(5) Gross BTU BTU/lb		(6) Carbon Mole Wt.	(7) Hydrogen Mole Wt.	(8) Oxygen Mole Wt.	(9) Nitrogen Mole Wt.	
Hydrogen H2	0.0000	2.0159	0.0000	0.000			0.000	0.000			
Oxygen O2	0.0000	31.9988	0.0000	0.000			0.000	0.000	0.000		
Nitrogen N2	0.3990	28.0134	0.1118	0.642			0.000	0.000		0.112	
CO2	2.4720	44.0100	1.0879	6.251			0.297	0.000	0.791		
CO	0.0000	28.0134	0.0000	0.000			0.000	0.000	0.000		
Methane C1H4	93.4491	16.0430	14.9921	86.143	20653.1509		11.224	3.768			
Ethane C2H6	3.1381	30.0701	0.9436	5.422	1215.1551		0.754	0.190			
Propane C3H8	0.3920	44.0972	0.1729	0.993	215.8260		0.141	0.032			
Iso-Butane IC4H10	0.0540	58.1243	0.0314	0.180	38.4256		0.026	0.005			
N-Butane NC4H10	0.0540	58.1243	0.0314	0.180	38.5485		0.026	0.005			
Iso-Pentane IC5H12	0.0150	72.1514	0.0108	0.062	13.1322		0.009	0.002			
N-Pentane NC5H12	0.0090	72.1514	0.0065	0.037	7.8951		0.005	0.001			
Hexanes + C6H14+	0.0178	86.1785	0.0153	0.088	18.5243		0.013	0.003			
Heptanes + C7H15+	0.0000	100.2056	0.0000	0.000	0.0000		0.000	0.000			
H2S	0.0000	34.0760	0.0000	0.000	0.0000						
	100.0000%		17.404	100%	23000.8578 BTU/lb Gross Heating Value	Mass by elements (gr/mole)	12.496	4.005	0.791	0.112	= 17.40
						Percent of Total Mass	71.798	23.015	4.545	0.642	= 100.00%

Calulation of O2 based "F" factor using Fuel Gas Analysis

Where:

O_2F_d	=	O2 F factor (dry) SCF/million BTU
K	=	Conversion factor (1,000,000 BTU)
K_H	=	3.64 SCF of exhaust / lb of hydrogen burned / (% hydrogen)
K_C	=	1.53 SCF of exhaust / lb of carbon burned / (% carbon)
K_S	=	0.57 SCF of exhaust / lb of sulphur burned / (% sulphur)
K_N	=	0.14 SCF of exhaust / lb of nitrogen burned / (% nitrogen)
K_o	=	0.46 SCF of exhaust / lb of oxygen burned / (% oxygen)
GCV	=	Gross caloric value of the fuel based on fuel gas analysis in BTU/lb

PERCENT OF TOTAL MASS:

H	=	23.01 %
C	=	71.80 %
S	=	0.00 %
N	=	0.64 %
O	=	4.55 %

O_2F_d = **8631**

Appendix H. Resumes of Test Personnel

James N. Mode, QSTI; Environmental, Health & Safety Specialist

EDUCATION

Baylor University
Waco, Texas
Obtained a B.A. degree with a major in Pre-medical Biology and a minor in Telecommunications Production.

Sam Houston State University
Huntsville, Texas
Worked towards a Masters of Science majoring in Microbiology.

PROFESSIONAL CERTIFICATIONS

Qualified Source Testing Individual (Groups I, II, III and IV)
Certified Visible Emissions Evaluator
Hazmat Certified
Adult CPR Certified
Standard First Aid Certified

TECHNICAL EXPERIENCE

Attended a 40-hour Occupational and Environmental Training Program on Hazardous Materials (CFR 1910.120).

Attended a two day short course, "Performing and Observing Source Sampling."

Attended a 10-hour OSHA training Course.

Participated in the sampling of over 1000 sources, including over 750 serving in the roll of field testing supervisor.

Thoroughly trained in all EPA testing procedures, 1997-present.

Responsible for the certification of Continuous Monitoring Systems (CEMS) for NO_x, SO_2, CO_2, O_2 and flow rate primarily for the utility industry throughout the United States.

Experienced with VOST sampling procedures (Method 0030).

Experienced with the calibration techniques for all field testing equipment.

TECHNICAL EXPERIENCE (cont.)

Experienced with the analysis of commercial calibration gas cylinders for NO_x, SO_2, CO_2 and O_2.

Experienced with various multiple metal and acid gas sampling methods.

Thoroughly trained in the operation and routine maintenance of the following:

- Thermo Environmental Model 10S and 42C Oxides of Nitrogen Analyzers
- Teledyne Model 326 Oxygen Analyzer
- Horiba Model PIR2000 Carbon Dioxide Analyzer
- Horiba Model VIA510 Carbon Dioxide Analyzer
- J.U.M. Model VE-7 Total Hydrocarbon Analyzer
- Thermo Environmental Model 48 Carbon Monoxide Analyzer
- Western Research Model 721M Sulfur Dioxide Analyzer
- California Analytical 600 Series Oxygen Analyzer
- California Analytical 600 Series Oxides of Nitrogen Analyzer
- California Analytical 600 Series Hydrocarbon Analyzer
- California Analytical 600 Series Carbon Monoxide Analyzer

Steven J. Bornsen; Field Supervisor

EDUCATION

University of Texas at Arlington
Arlington, Texas
Obtained a B.S. degree with a major in Geology and a minor in Statistics.

PROFESSIONAL CERTIFICATIONS

Certified Visible Emissions Evaluator
Hazmat Certified
Adult CPR Certified
Standard First Aid Certified

TECHNICAL EXPERIENCE

Attended a 40-hour Occupational and Environmental Training Program on Hazardous Materials (CFR 1910.120).

Attended a two day short course, "Performing and Observing Source Sampling."

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- Thermo Environmental Model 48 Carbon Monoxide Analyzer
- Western Research Model 721M Sulfur Dioxide Analyzer
- California Analytical 600 Series Oxygen Analyzer
- California Analytical 600 Series Oxides of Nitrogen Analyzer
- California Analytical 600 Series Hydrocarbon Analyzer

Attachment 3

To convert dscfh to dscmh:

dscmh = .02831685 dscfh

	ppmd	HP	Time of test	Flow Rate (dscfh)	Flow Rate (scmh)	Equation 1 from JJJJ	Reported Results	Actual Difference
Run 1	9.54	1057	1	76625	2169.779	0.0374	0.0339	0.0035
Run 2	8.17	1053	1	76625	2169.779	0.0322	0.0290	0.0032
Run 3	9.81	1053	1	76257	2159.358	0.0385	0.0349	0.0036

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 12 2012

Mr. Dennis Alder
Coordinator Field-EHS
Chesapeake Midstream Partners, LLC
5601 East 1st St
Fort Worth, Texas 76103

Re: Ponder Compressor Station Inspection
June 2, 2011

Dear Mr. Adler:

As you are aware, the U.S. Environmental Protection Agency (EPA) Region 6, under the authority of the Clean Air Act (CAA), conducted a partial compliance evaluation of the Ponder Compressor Station in Justin, Denton County, Texas, on June 2, 2011. On October 6, 2011, the EPA sent you an electronic copy of the inspection report which identified areas of concern (AOCs). In a letter dated November 7, 2011, Chesapeake Midstream Partners, LLC, (Chesapeake) responded to the AOCs and provided supplemental information.

Based on discussions with Chesapeake personnel and a review of all information provided by Chesapeake, the EPA has closed its evaluation of this inspection. This letter does not relieve Chesapeake, from their responsibility to comply with all requirements of the CAA and the requirements of any permits issued there under, nor does it constitute a waiver by EPA of its right to enforce compliance with the requirements of any permits, regulations, or other requirements of the CAA.

Should you have any questions, please do not hesitate to contact Dominique Duplechain of my staff at (214) 665-7484 or by email at duplechain.dominique@epa.gov.

Sincerely,

Samuel Tates

Samuel Tates
Chief
Air Surveillance Section

cc: Michael de la Cruz
Texas Commission on Environmental Quality

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