CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: **UGI**
PLANT: **Hunlock**
UNIT: **6**
LOAD: Low

RUN: 2
DATE: 4 7 04
TIME START: 16:25
END: 16:35

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq. ft.
Pb = 29.53 P_{bar}
Ps = -0.36 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	ANIAL VEL Vs FT/S	WAF VEL Vs FT/S
A-1	5	0.21	-0.03	-0.14	-9	10.29	1.048	0.22	-0.58	320	38.40	38.2
A-2	6	0.21	-0.02	-0.10	-7	9.21	1.039	0.22	-0.58	320	38.19	38.0
A-3	5	0.20	-0.01	-0.05	-3	5.83	1.028	0.21	-0.57	322	37.21	37.0
A-4	7	0.19	-0.01	-0.05	-3	7.61	1.028	0.20	-0.56	330	36.32	36.1
A-5	-1	0.19	-0.02	-0.11	-7	7.07	1.039	0.20	-0.56	334	36.85	36.7
A-6	-7	0.18	-0.02	-0.11	-7	9.89	1.039	0.19	-0.55	332	35.56	35.4
A-7	-2	0.15	-0.02	-0.13	-8	8.24	1.044	0.16	-0.52	330	32.72	32.6
A-8	1	0.12	-0.01	-0.08	-6	6.08	1.035	0.12	-0.48	327	29.10	29.0
B-1	2	0.21	-0.02	-0.10	-7	7.28	1.039	0.22	-0.58	330	38.62	38.4
B-2	3	0.19	-0.01	-0.05	-3	4.24	1.028	0.20	-0.56	332	36.59	36.4
B-3	3	0.20	-0.02	-0.10	-7	7.61	1.039	0.21	-0.57	334	37.76	37.6
B-4	1	0.18	-0.03	-0.17	-10	10.05	1.053	0.19	-0.55	335	36.09	35.9
B-5	4	0.20	-0.02	-0.10	-7	8.06	1.039	0.21	-0.57	335	37.74	37.6
B-6	-1	0.19	-0.01	-0.05	-3	3.16	1.028	0.20	-0.56	338	36.77	36.6
B-7	-1	0.18	-0.01	-0.06	-4	4.12	1.029	0.19	-0.55	337	35.77	35.6
B-8	2	0.10	-0.02	-0.20	-12	12.16	1.066	0.11	-0.47	335	27.03	26.9
						Ri 7.56 avg			Ps -0.55 avg	TEMP 330.7 avg	Vs 35.67 avg	Vs 35.49 avg

MOISTURE 6.96 %
MD 0.93
MWD = 30.12
MW = 29.28
Psa = 29.49

O2 % 8.6
CO2 % 11.1
N2 % = 80.3

VOLUMETRIC FLOW RATE
Qs = 5,547,478 DSCFH
Qs = 5,963,000 WSCFH
Qa = 9,059,428 ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 2
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 16:25
END: 16:35

DATE	TIME	O2	CO2
4/7/04	16:25	8.28	11.37
4/7/04	16:26	8.35	11.25
4/7/04	16:27	8.56	11.07
4/7/04	16:28	8.92	10.76
4/7/04	16:29	8.84	10.86
4/7/04	16:30	9	10.65
4/7/04	16:31	8.81	10.92
4/7/04	16:32	8.51	11.2
4/7/04	16:33	8.7	11.04
4/7/04	16:34	8.43	11.24
4/7/04	16:35	8	11.6
		O2	CO2
		8.58	11.09
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.04	0.08	**YES**	0.05	0.12	0.04	**YES**
O2, %	12.42	12.45	0.12	**YES**	12.46	0.16	0.04	**YES**
CO2, %	0.03	0.05	0.10	**YES**	0.07	0.20	0.10	**YES**
CO2, %	10.04	9.99	0.25	**YES**	10.03	0.05	0.20	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	8.6
CO2, %	11.1

% MOISTURE = **6.96**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	8.6	8.0
CO2, %	11.1	10.3

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: **UGI**
PLANT: **Hunlock**
UNIT: **6**
LOAD: Low

RUN: 3
DATE: 4 7 04
TIME START: 16:36
END: 16:46

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq. ft.
Pb = 29.53 P_{bar}
Ps = -0.36 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
B-1	**2**	**0.21**	**-0.02**	-0.10	-7	7.28	**1.039**	0.22	-0.58	**333**	38.69	38.5
B-2	**3**	**0.20**	**-0.03**	-0.15	-9	9.48	**1.048**	0.21	-0.57	**334**	37.89	37.7
B-3	**9**	**0.19**	**-0.02**	-0.11	-7	11.38	**1.039**	0.20	-0.56	**335**	36.42	36.2
B-4	**-1**	**0.19**	**-0.04**	-0.21	-12	12.04	**1.066**	0.20	-0.56	**337**	37.32	37.1
B-5	**4**	**0.21**	**-0.01**	-0.05	-3	5.00	**1.028**	0.22	-0.58	**336**	38.52	38.3
B-6	**-6**	**0.19**	**-0.01**	-0.05	-3	6.71	**1.028**	0.20	-0.56	**334**	36.48	36.3
B-7	**3**	**0.18**	**-0.02**	-0.11	-7	7.61	**1.039**	0.19	-0.55	**330**	35.72	35.5
B-8	**2**	**0.10**	**-0.01**	-0.10	-7	7.28	**1.039**	0.10	-0.46	**330**	26.65	26.5
A-1	**4**	**0.20**	**-0.03**	-0.15	-9	9.84	**1.048**	0.21	-0.57	**330**	37.76	37.6
A-2	**2**	**0.20**	**-0.02**	-0.10	-7	7.28	**1.039**	0.21	-0.57	**333**	37.76	37.6
A-3	**-1**	**0.20**	**-0.01**	-0.05	-3	3.16	**1.028**	0.21	-0.57	**335**	37.65	37.5
A-4	**-3**	**0.19**	**-0.01**	-0.05	-3	4.24	**1.028**	0.20	-0.56	**336**	36.68	36.5
A-5	**5**	**0.18**	**-0.02**	-0.11	-7	8.60	**1.039**	0.19	-0.55	**338**	35.82	35.6
A-6	**0**	**0.17**	**-0.01**	-0.06	-4	4.00	**1.029**	0.17	-0.53	**337**	34.76	34.6
A-7	**-1**	**0.16**	**-0.01**	-0.06	-4	4.12	**1.029**	0.16	-0.52	**334**	33.65	33.5
A-8	**6**	**0.12**	**-0.01**	-0.08	-6	8.48	**1.035**	0.12	-0.48	**329**	28.98	28.8
						Ri			Ps	TEMP	Vs	Vs
						7.28			-0.55	333.8	35.67	35.49
						avg			avg	avg	avg	avg

MOISTURE = 6.96 %
MD = 0.93
MWD = 30.13
MW = 29.29
Psa = 29.49

O2 % = 8.5
CO2 % = 11.2
N2 % = 80.3

VOLUMETRIC FLOW RATE
Qs = 5,525,611 DSCFH
Qs = 5,939,000 WSCFH
Qa = 9,059,366 ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 3
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 16:36
END: 16:46

DATE	TIME	O2	CO2
4/7/04	16:36	8.2	11.43
4/7/04	16:37	8.36	11.25
4/7/04	16:38	8.4	11.2
4/7/04	16:39	8.52	11.15
4/7/04	16:40	8.67	11.03
4/7/04	16:41	8.65	11.04
4/7/04	16:42	9.05	10.73
4/7/04	16:43	8.48	11.13
4/7/04	16:44	8.47	11.12
4/7/04	16:45	8.43	11.21
4/7/04	16:46	8.49	11.21
		O2	CO2
		8.52	11.14
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.04	0.08	**YES**	0.05	0.12	0.04	**YES**
O2, %	12.42	12.45	0.12	**YES**	12.46	0.16	0.04	**YES**
CO2, %	0.03	0.05	0.10	**YES**	0.07	0.20	0.10	**YES**
CO2, %	10.04	9.99	0.25	**YES**	10.03	0.05	0.20	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	8.5
CO2, %	11.1

% MOISTURE = **6.96**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	8.5	7.9
CO2, %	11.2	10.4

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
LOAD: Low

RUN: 4
DATE: 4 7 04
TIME START: 16:53
END: 17:03

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq. ft.
Pb = 29.22 P_{bar}
Ps = -0.30 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FPS	WAF VEL Vs FPS
A-1	-1	0.19	-0.02	-0.11	-7	7.07	1.039	0.20	-0.50	328	36.83	36.6
A-2	1	0.19	-0.02	-0.11	-7	7.07	1.039	0.20	-0.50	330	36.88	36.7
A-3	1	0.19	-0.01	-0.05	-3	3.16	1.028	0.20	-0.50	330	36.71	36.5
A-4	3	0.18	-0.01	-0.06	-4	5.00	1.029	0.19	-0.49	331	35.71	35.5
A-5	-4	0.17	-0.01	-0.06	-4	5.65	1.029	0.17	-0.47	329	34.62	34.4
A-6	-3	0.16	-0.02	-0.13	-8	8.54	1.044	0.17	-0.47	326	33.80	33.6
A-7	-1	0.14	-0.01	-0.07	-5	5.10	1.031	0.14	-0.44	330	31.53	31.4
A-8	0	0.12	-0.02	-0.17	-10	10.00	1.053	0.13	-0.43	330	29.47	29.3
B-1	5	0.19	-0.01	-0.05	-3	5.83	1.028	0.20	-0.50	318	36.30	36.1
B-2	7	0.19	-0.02	-0.11	-7	9.89	1.039	0.20	-0.50	320	36.37	36.2
B-3	8	0.19	-0.03	-0.16	-10	12.78	1.053	0.20	-0.50	320	36.49	36.3
B-4	1	0.19	-0.04	-0.21	-12	12.04	1.066	0.20	-0.50	320	37.05	36.9
B-5	-1	0.20	-0.01	-0.05	-3	3.16	1.028	0.21	-0.51	322	37.47	37.3
B-6	4	0.18	-0.01	-0.06	-4	5.65	1.029	0.19	-0.49	324	35.51	35.3
B-7	1	0.17	-0.02	-0.12	-8	8.06	1.044	0.18	-0.48	327	34.90	34.7
B-8	2	0.16	-0.01	-0.06	-4	4.47	1.029	0.16	-0.46	321	33.48	33.3
						Ri			Ps	TEMP	Vs	Vs
						7.09			-0.48	325.4	35.19	35.02
						avg			avg	avg	avg	avg

MOISTURE = 6.31 %
MD = 0.94
MWD = 30.16
MW = 29.39
Psa = 29.18

O2 % = 8.3
CO2 % = 11.4
N2 % = 80.3

VOLUMETRIC FLOW RATE
Qs = 5,491,304 DSCFH
Qs = 5,862,000 WSCFH
Qa = 8,938,441 ACFH

MOISTURE DATA

ACTUAL TIME	RUN TIME	GAS VOL FT^3	ORIFICE IN. H2O	METER TEMPERATURE INLET	OUTLET	METER Yi	BAR. PRESS. IN. Hg
16:53	0	16.031	1.63	67	65	0.98	29.22
	5	19.2		68	66		
	10	23.5		68	66		
	15	27.0		69	67		
	20	30.8		69	67		
	25	34.3		69	67		
17:23	30	37.842					
		21.811	1.63		67		

VOLUME OF MOISTURE (ml)

IMPINGERS	INITIAL	FINAL	
1	100	122	
2	100	104	
3	0	0	
Gel	260	264	Total
NET	460	490	30

TOTAL MOISTURE (ml) 30

VM(STD)= 20.978
VW(GAS)= 1.413

%MOISTURE = 6.31

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 4
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 16:53
END: 17:03

DATE	TIME	O2	CO2
4/7/04	16:53	8.82	10.84
4/7/04	16:54	8.94	10.73
4/7/04	16:55	8.65	11.03
4/7/04	16:56	8.2	11.46
4/7/04	16:57	8.11	11.6
4/7/04	16:58	8.45	11.19
4/7/04	16:59	8.6	11.04
4/7/04	17:00	7.94	11.68
4/7/04	17:01	7.91	11.68
4/7/04	17:02	7.82	11.83
4/7/04	17:03	7.94	11.62
		O2	CO2
		8.31	11.34
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.05	0.12	0.00	**YES**
O2, %	12.42	12.46	0.16	**YES**	12.48	0.24	0.08	**YES**
CO2, %	0.03	0.07	0.20	**YES**	0.11	0.40	0.20	**YES**
CO2, %	10.04	10.03	0.05	**YES**	9.98	0.30	0.25	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	8.3
CO2, %	11.3

% MOISTURE = **6.31**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	8.3	7.8
CO2, %	11.4	10.7

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT:	**UGI**	RUN:	5	STACK DIAMETER =	114 in
PLANT:	**Hunlock**	DATE:	4 7 04	STACK AREA =	70.9 sq. ft.
UNIT:	**6**	TIME START:	17:04	Pb =	29.22 P_{bar}
LOAD:	Low	END:	17:14	Ps =	-0.30 in Hg
				WAF	0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5) / (P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps) / (P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
B-1	**6**	**0.19**	**-0.03**	-0.16	**-10**	11.65	**1.053**	0.20	-0.50	**322**	36.68	36.5
B-2	**3**	**0.18**	**-0.02**	-0.11	-7	7.61	**1.039**	0.19	-0.49	**326**	35.74	35.6
B-3	**-2**	**0.18**	**-0.02**	-0.11	-7	7.28	**1.039**	0.19	-0.49	**327**	35.79	35.6
B-4	**1**	**0.18**	**-0.01**	-0.06	**-4**	4.12	**1.029**	0.19	-0.49	**329**	35.69	35.5
B-5	**4**	**0.20**	**-0.01**	-0.05	**-3**	5.00	**1.028**	0.21	-0.51	**332**	37.60	37.4
B-6	**-3**	**0.17**	**-0.02**	-0.12	**-8**	8.54	**1.044**	0.18	-0.48	**333**	34.97	34.8
B-7	**2**	**0.17**	**-0.01**	-0.06	**-4**	4.47	**1.029**	0.17	-0.47	**329**	34.66	34.5
B-8	**2**	**0.16**	**-0.03**	-0.19	**-11**	11.18	**1.059**	0.17	-0.47	**328**	34.04	33.9
A-1	**0**	**0.19**	**-0.04**	-0.21	**-12**	12.00	**1.066**	0.20	-0.50	**334**	37.37	37.2
A-2	**-5**	**0.18**	**-0.02**	-0.11	-7	8.60	**1.039**	0.19	-0.49	**335**	35.86	35.7
A-3	**-2**	**0.18**	**-0.01**	-0.06	**-4**	4.47	**1.029**	0.19	-0.49	**335**	35.80	35.6
A-4	**3**	**0.17**	**-0.01**	-0.06	**-4**	5.00	**1.029**	0.17	-0.47	**336**	34.79	34.6
A-5	**1**	**0.17**	**-0.01**	-0.06	**-4**	4.12	**1.029**	0.17	-0.47	**336**	34.83	34.7
A-6	**-2**	**0.16**	**-0.02**	-0.13	**-8**	8.24	**1.044**	0.17	-0.47	**334**	33.98	33.8
A-7	**0**	**0.14**	**-0.02**	-0.14	**-9**	9.00	**1.048**	0.15	-0.45	**332**	31.80	31.6
A-8	**1**	**0.13**	**-0.02**	-0.15	**-9**	9.05	**1.048**	0.14	-0.44	**330**	30.60	30.4
						Ri			Ps	TEMP	Vs	Vs
						7.52			-0.48	331.1	35.01	34.84
						avg			avg	avg	avg	avg

MOISTURE =	6.31	%
MD =	0.94	
MWD =	30.19	
MW =	29.42	
Psa =	29.18	

O2 % =	7.9	
CO2 % =	11.7	
N2 % =	80.4	

VOLUMETRIC FLOW RATE

Qs =	5,423,317	DSCFH
Qs =	5,789,000	WSCFH
Qa =	8,892,329	ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 5
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 17:04
END: 17:14

DATE	TIME	O2	CO2
4/7/04	17:04	7.8	11.72
4/7/04	17:05	7.83	11.74
4/7/04	17:06	7.99	11.53
4/7/04	17:07	7.96	11.66
4/7/04	17:08	8.15	11.52
4/7/04	17:09	8.18	11.35
4/7/04	17:10	8.01	11.59
4/7/04	17:11	7.8	11.82
4/7/04	17:12	7.79	11.82
4/7/04	17:13	8.25	11.43
4/7/04	17:14	8.08	11.45
		O2	CO2
		7.99	11.60
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.05	0.12	0.00	**YES**
O2, %	12.42	12.46	0.16	**YES**	12.48	0.24	0.08	**YES**
CO2, %	0.03	0.07	0.20	**YES**	0.11	0.40	0.20	**YES**
CO2, %	10.04	10.03	0.05	**YES**	9.98	0.30	0.25	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	8.0
CO2, %	11.6

% MOISTURE = **6.31**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.9	7.4
CO2, %	11.7	11.0

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT:	**UGI**	RUN:	6	STACK DIAMETER =	114	in
PLANT:	**Hunlock**	DATE:	4 7 04	STACK AREA =	70.9	sq. ft.
UNIT:	**6**	TIME START:	17:15	Pb =	29.22	P_{bar}
LOAD:	Low	END:	17:25	Ps =	-0.30	in Hg
				WAF =	0.995	

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	ANIM. VEL Vs FT/S	WAF VEL Vs FT/S
A-1	**2**	**0.19**	**-0.02**	-0.11	-7	7.28	**1.039**	0.20	-0.50	**330**	36.85	36.7
A-2	**1**	**0.18**	**-0.03**	-0.17	**-10**	10.05	**1.053**	0.19	-0.49	**332**	36.13	35.9
A-3	**3**	**0.18**	**-0.02**	-0.11	-7	7.61	**1.039**	0.19	-0.49	**334**	35.93	35.7
A-4	**-2**	**0.18**	**-0.01**	-0.06	-4	4.47	**1.029**	0.19	-0.49	**333**	35.77	35.6
A-5	**0**	**0.17**	**-0.01**	-0.06	-4	4.00	**1.029**	0.17	-0.47	**336**	34.85	34.7
A-6	**1**	**0.16**	**-0.02**	-0.13	-8	8.06	**1.044**	0.17	-0.47	**331**	33.93	33.8
A-7	**3**	**0.14**	**-0.02**	-0.14	-9	9.48	**1.048**	0.15	-0.45	**330**	31.72	31.6
A-8	**-1**	**0.12**	**-0.01**	-0.08	-6	6.08	**1.035**	0.12	-0.42	**329**	29.22	29.1
B-1	**8**	**0.19**	**-0.03**	-0.16	**-10**	12.78	**1.053**	0.20	-0.50	**326**	36.62	36.4
B-2	**7**	**0.19**	**-0.02**	-0.11	-7	9.89	**1.039**	0.20	-0.50	**328**	36.55	36.4
B-3	**-3**	**0.18**	**-0.02**	-0.11	-7	7.61	**1.039**	0.19	-0.49	**329**	35.81	35.6
B-4	**1**	**0.18**	**-0.01**	-0.06	-4	4.12	**1.029**	0.19	-0.49	**330**	35.71	35.5
B-5	**-4**	**0.20**	**-0.03**	-0.15	-9	9.84	**1.048**	0.21	-0.51	**331**	37.90	37.7
B-6	**2**	**0.18**	**-0.01**	-0.06	-4	4.47	**1.029**	0.19	-0.49	**327**	35.63	35.5
B-7	**1**	**0.17**	**-0.01**	-0.06	-4	4.12	**1.029**	0.17	-0.47	**326**	34.62	34.4
B-8	**2**	**0.15**	**-0.02**	-0.13	-8	8.24	**1.044**	0.16	-0.46	**326**	32.74	32.6
						Ri			Ps	TEMP	Vs	Vs
						7.38			-0.48	329.9	35.00	34.82
						avg			avg	avg	avg	avg

MOISTURE =	6.31	%
MD =	0.94	
MWD =	30.18	
MW =	29.41	
Psa =	29.18	

O2 % =	8.0
CO2 % =	11.6
N2 % =	80.4

VOLUMETRIC FLOW RATE

Qs =	5,429,789	DSCFH
Qs =	5,796,000	WSCFH
Qa =	8,888,884	ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 6
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 17:15
END: 17:25

DATE	TIME	O2	CO2
4/7/04	17:15	7.93	11.57
4/7/04	17:16	8.13	11.59
4/7/04	17:17	7.98	11.63
4/7/04	17:18	8.07	11.55
4/7/04	17:19	7.72	11.73
4/7/04	17:20	8.02	11.47
4/7/04	17:21	7.9	11.69
4/7/04	17:22	7.97	11.68
4/7/04	17:23	8.33	11.27
4/7/04	17:24	8.34	11.18
4/7/04	17:25	8.01	11.47
		O2	CO2
		8.04	11.53
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.05	0.12	0.00	**YES**
O2, %	12.42	12.46	0.16	**YES**	12.48	0.24	0.08	**YES**
CO2, %	0.03	0.07	0.20	**YES**	0.11	0.40	0.20	**YES**
CO2, %	10.04	10.03	0.05	**YES**	9.98	0.30	0.25	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	8.0
CO2, %	11.5

% MOISTURE = **6.31**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	8.0	7.5
CO2, %	11.6	10.9

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
LOAD: Low

RUN: 7
DATE: 4 7 04
TIME START: 17:31
END: 17:41

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq. ft.
Pb = 29.22 P_{bar}
Ps = -0.30 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF 2.8 (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	ACTUAL VEL Vs FT/S	WAF VEL Vs FT/S
B-1	5	0.19	-0.02	-0.11	-7	8.60	1.039	0.20	-0.50	322	36.51	36.3
B-2	-2	0.19	-0.01	-0.05	-3	3.61	1.028	0.20	-0.50	324	36.51	36.3
B-3	1	0.18	-0.04	-0.22	-13	13.04	1.072	0.19	-0.49	326	36.22	36.0
B-4	2	0.18	-0.02	-0.11	-7	7.28	1.039	0.19	-0.49	328	35.79	35.6
B-5	-3	0.20	-0.01	-0.05	-3	4.24	1.028	0.21	-0.51	327	37.50	37.3
B-6	6	0.18	-0.01	-0.06	-4	7.21	1.029	0.19	-0.49	327	35.43	35.2
B-7	2	0.16	-0.01	-0.06	-4	4.47	1.029	0.16	-0.46	329	33.61	33.4
B-8	-1	0.15	-0.02	-0.13	-8	8.06	1.044	0.16	-0.46	326	32.72	32.6
A-1	2	0.19	-0.03	-0.16	-10	10.20	1.053	0.20	-0.50	328	36.97	36.8
A-2	-1	0.19	-0.02	-0.11	-7	7.07	1.039	0.20	-0.50	329	36.81	36.6
A-3	0	0.18	-0.02	-0.11	-7	7.00	1.039	0.19	-0.49	332	35.90	35.7
A-4	3	0.18	-0.01	-0.06	-4	5.00	1.029	0.19	-0.49	333	35.71	35.5
A-5	-2	0.17	-0.02	-0.12	-8	8.24	1.044	0.18	-0.48	334	35.00	34.8
A-6	-1	0.16	-0.02	-0.13	-8	8.06	1.044	0.17	-0.47	332	33.93	33.8
A-7	7	0.13	-0.01	-0.08	-6	9.21	1.035	0.13	-0.43	332	30.22	30.1
A-8	-1	0.12	-0.01	-0.08	-6	6.08	1.035	0.12	-0.42	330	29.22	29.1
						Ri			Ps	TEMP	Vs	Vs
						7.34			-0.48	328.7	34.88	34.70
						avg			avg	avg	avg	avg

MOISTURE = 5.91 %
MD = 0.94
MWD = 30.18
MW 29.46
Psa 29.18

O2 % = 8.1
CO2 % = 11.6
N2 % = 80.3

VOLUMETRIC FLOW RATE
Qs = 5,442,175 DSCFH
Qs = 5,784,000 WSCFH
Qa = 8,857,886 ACFH

MOISTURE DATA

ACTUAL TIME	RUN TIME	GAS VOL FT^3	ORIFICE IN. H2O	METER TEMPERATURE INLET	OUTLET	METER Yi	BAR. PRESS. IN. Hg
17:31	0	38.035	1.63	67	65	0.98	29.22
	5	41.6		67	65		
	10	45.3		66	65		
	15	49.0		65	64		
	20	52.6		64	63		
	25	55.8		63	62		
18:01	30	59.754					
		21.719	1.63		65		

VOLUME OF MOISTURE (ml)

IMPINGERS	INITIAL	FINAL	
1	100	122	
2	100	102	
3	0	0	
Gel	256	260	Total
NET	456	484	28

TOTAL MOISTURE (ml) 28

VM(STD)= 20.996
VW(GAS)= 1.319

%MOISTURE = 5.91

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 7
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 17:31
END: 17:41

DATE	TIME	O2	CO2
4/7/04	17:31	8.16	11.44
4/7/04	17:32	8.24	11.35
4/7/04	17:33	7.89	11.71
4/7/04	17:34	7.7	11.91
4/7/04	17:35	8.02	11.48
4/7/04	17:36	8.21	11.29
4/7/04	17:37	7.93	11.64
4/7/04	17:38	8.13	11.48
4/7/04	17:39	8.76	10.9
4/7/04	17:40	8.06	11.49
4/7/04	17:41	8.12	11.5
		O2	CO2
		8.11	11.47
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.07	0.20	0.08	**YES**
O2, %	12.42	12.48	0.24	**YES**	12.50	0.32	0.08	**YES**
CO2, %	0.03	0.11	0.40	**YES**	0.10	0.35	0.05	**YES**
CO2, %	10.04	9.98	0.30	**YES**	9.95	0.45	0.15	**YES**

UNCORRECTED ANALYZER VALUES

O2, %	8.1
CO2, %	11.5

% MOISTURE = **5.91**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	8.1	7.6
CO2, %	11.6	10.9

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT:	**UGI**	RUN:	8	STACK DIAMETER =	114	in
PLANT:	**Hunlock**	DATE:	4 7 04	STACK AREA =	70.9	sq ft
UNIT:	**6**	TIME START:	1 7 42	Pb =	29.22	P_{bar}
LOAD:	Low	END	17:52	Ps =	-0.30	in Hg
				WAF =	0.995	

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
A-1	**3**	**0.19**	**-0.01**	-0.05	**-3**	4.21	**1.028**	0.20	-0.50	**330**	36.61	36.4
A-2	**-1**	**0.19**	**-0.02**	-0.11	**-7**	7.07	**1.039**	0.20	-0.50	**334**	36.91	36.7
A-3	**7**	**0.18**	**-0.02**	-0.11	**-7**	9.89	**1.039**	0.19	-0.49	**336**	35.71	35.5
A-4	**5**	**0.18**	**-0.01**	-0.06	**-4**	6.40	**1.029**	0.19	-0.49	**338**	35.72	35.5
A-5	**2**	**0.17**	**-0.03**	-0.18	**-11**	11.18	**1.059**	0.18	-0.48	**334**	35.18	35.0
A-6	**-1**	**0.16**	**-0.01**	-0.06	**-4**	4.12	**1.029**	0.16	-0.46	**332**	33.67	33.5
A-7	**0**	**0.13**	**-0.03**	-0.23	**-13**	13.00	**1.072**	0.14	-0.44	**329**	30.83	30.7
A-8	**-3**	**0.13**	**-0.02**	-0.15	**-9**	9.48	**1.048**	0.14	-0.44	**328**	30.49	30.3
B-1	**-2**	**0.19**	**-0.02**	-0.11	**-7**	7.28	**1.039**	0.20	-0.50	**324**	36.66	36.5
B-2	**4**	**0.18**	**-0.01**	-0.06	**-4**	5.65	**1.029**	0.19	-0.49	**324**	35.48	35.3
B-3	**6**	**0.18**	**0.01**	-0.06	**-4**	7.21	**1.029**	0.19	-0.49	**326**	35.39	35.2
B-4	**2**	**0.19**	**-0.02**	-0.11	**-7**	7.28	**1.039**	0.20	-0.50	**322**	36.62	36.4
B-5	**-2**	**0.19**	**-0.01**	-0.05	**-3**	3.61	**1.028**	0.20	-0.50	**322**	36.45	36.3
B-6	**0**	**0.17**	**-0.02**	-0.12	**-8**	8.00	**1.044**	0.18	-0.48	**323**	34.76	34.6
B-7	**-1**	**0.16**	**-0.02**	-0.13	**-8**	8.06	**1.044**	0.17	-0.47	**325**	33.76	33.6
B-8	**2**	**0.15**	**-0.02**	-0.13	**-8**	8.24	**1.044**	0.16	-0.46	**324**	32.66	32.5
						Ri			Ps	TEMP	Vs	Vs
						7.54			-0.48	328.2	34.81	34.63
						avg			avg	avg	avg	avg

MOISTURE	5.91	%
MD =	0.94	
MWD =	30.20	
MW =	29.48	
Psa =	29.18	

O2 % =	7.8	
CO2 % =	11.8	
N2 % =	80.4	

VOLUMETRIC FLOW RATE

Qs =	5,434,546	DSCFH
Qs =	5,776,000	WSCFH
Qa =	8,839,847	ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 8
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 17:42
END: 17:52

DATE	TIME	O2	CO2
4/7/04	17:42	8.1	11.59
4/7/04	17:43	8.09	11.43
4/7/04	17:44	8.27	11.22
4/7/04	17:45	8.31	11.17
4/7/04	17:46	7.79	11.63
4/7/04	17:47	7.82	11.77
4/7/04	17:48	7.98	11.69
4/7/04	17:49	7.74	11.86
4/7/04	17:50	7.21	12.35
4/7/04	17:51	7.82	11.69
4/7/04	17:52	7.69	11.85
		O2	CO2
		7.89	11.66
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.07	0.20	0.08	**YES**
O2, %	12.42	12.48	0.24	**YES**	12.50	0.32	0.08	**YES**
CO2, %	0.03	0.11	0.40	**YES**	0.10	0.35	0.05	**YES**
CO2, %	10.04	9.98	0.30	**YES**	9.95	0.45	0.15	**YES**

UNCORRECTED ANALYZER VALUES

O2, %	7.9
CO2, %	11.7

% MOISTURE = **5.91**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.8	7.3
CO2, %	11.8	11.1

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT:	**UGI**	RUN:	9	STACK DIAMETER =	114	in
PLANT:	**Hunlock**	DATE:	4 7 04	STACK AREA =	70.9	sq. ft.
UNIT:	**6**	TIME START:	17:53	Pb =	29.22	P_{bar}
LOAD:	Low	END:	18:03	Ps =	-0.30	in Hg
				WAF =	0.995	

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
B-1	**2**	**0.19**	**-0.01**	-0.05	**-3**	3.61	**1.028**	0.20	-0.50	**322**	36.45	36.3
B-2	**4**	**0.18**	**-0.03**	-0.17	**-10**	10.76	**1.053**	0.19	-0.49	**323**	35.79	35.6
B-3	**-3**	**0.18**	**-0.02**	-0.11	**-7**	7.61	**1.039**	0.19	-0.49	**324**	35.66	35.5
B-4	**0**	**0.18**	**-0.02**	-0.11	**-7**	7.00	**1.039**	0.19	-0.49	**326**	35.75	35.6
B-5	**-2**	**0.20**	**-0.01**	-0.05	**-3**	3.61	**1.028**	0.21	-0.51	**328**	37.54	37.4
B-6	**1**	**0.17**	**-0.03**	-0.18	**-11**	11.04	**1.059**	0.18	-0.48	**327**	35.04	34.9
B-7	**4**	**0.16**	**-0.04**	-0.25	**-14**	14.55	**1.079**	0.17	-0.47	**327**	34.16	34.0
B-8	**7**	**0.15**	**-0.01**	-0.09	**-6**	9.21	**1.035**	0.16	-0.46	**325**	32.31	32.2
A-1	**5**	**0.19**	**-0.02**	-0.11	**-7**	8.60	**1.039**	0.20	-0.50	**330**	36.68	36.5
A-2	**-2**	**0.19**	**-0.01**	-0.05	**-3**	3.61	**1.028**	0.20	-0.50	**334**	36.73	36.5
A-3	**2**	**0.18**	**-0.01**	-0.06	**-4**	4.47	**1.029**	0.19	-0.49	**337**	35.81	35.6
A-4	**0**	**0.18**	**-0.02**	-0.11	**-7**	7.00	**1.039**	0.19	-0.49	**336**	35.98	35.8
A-5	**-3**	**0.16**	**-0.02**	-0.13	**-8**	8.54	**1.044**	0.17	-0.47	**334**	33.92	33.7
A-6	**-6**	**0.16**	**-0.03**	-0.19	**-11**	12.51	**1.059**	0.17	-0.47	**332**	33.92	33.8
A-7	**0**	**0.13**	**-0.01**	-0.08	**-6**	6.00	**1.035**	0.13	-0.43	**329**	30.38	30.2
A-8	**5**	**0.12**	**-0.01**	-0.08	**-6**	7.80	**1.035**	0.12	-0.42	**330**	29.10	29.0
						Ri			Ps	TEMP	Vs	Vs
						7.87			-0.48	329.0	34.70	34.53
						avg			avg	avg	avg	avg

MOISTURE =	5.91	%
MD =	0.94	
MWD =	30.20	
MW =	29.48	
Psa =	29.18	

O2 % =	7.8
CO2 % =	11.8
N2 % =	80.4

VOLUMETRIC FLOW RATE

Qs =	5,412,757	DSCFH
Qs =	5,753,000	WSCFH
Qa =	8,813,460	ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 9
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 17:53
END: 18:03

DATE	TIME	O2	CO2
4/7/04	17:53	8.13	11.45
4/7/04	17:54	7.82	11.85
4/7/04	17:55	7.74	11.82
4/7/04	17:56	7.99	11.67
4/7/04	17:57	8.01	11.68
4/7/04	17:58	7.81	11.83
4/7/04	17:59	7.85	11.86
4/7/04	18:00	7.58	12.01
4/7/04	18:01	7.98	11.54
4/7/04	18:02	7.94	11.48
4/7/04	18:03	7.72	11.7
		O2	CO2
		7.87	11.72
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.05	0.12	**YES**	0.07	0.20	0.08	**YES**
O2, %	12.42	12.48	0.24	**YES**	12.50	0.32	0.08	**YES**
CO2, %	0.03	0.11	0.40	**YES**	0.10	0.35	0.05	**YES**
CO2, %	10.04	9.98	0.30	**YES**	9.95	0.45	0.15	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	7.9
CO2, %	11.7

% MOISTURE = **5.91**

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.8	7.3
CO2, %	11.8	11.1

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
LOAD: Low

RUN: 10
DATE: 4 7 04
TIME START: 18:08
END: 18:18

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq. ft.
Pb = 29.22 P_{bar}
Ps = -0.30 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Yi	PRESSURE (in. of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF 2.8 (P4-P5)/(P1-P2)	PITCH ANGLE Pi	RESULT ANGLE Ri	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
A-1	4	0.19	-0.02	-0.11	-7	8.06	1.039	0.20	-0.50	320	36.56	36.4
A-2	2	0.18	-0.01	-0.06	-4	4.47	1.029	0.19	-0.49	322	35.53	35.4
A-3	-1	0.18	-0.02	-0.11	-7	7.07	1.039	0.19	-0.49	324	35.76	35.6
A-4	3	0.18	-0.03	-0.17	-10	10.44	1.053	0.19	-0.49	328	36.00	35.8
A-5	0	0.17	-0.01	-0.06	-4	4.00	1.029	0.17	-0.47	328	34.68	34.5
A-6	-2	0.15	-0.02	-0.13	-8	8.24	1.044	0.16	-0.46	327	32.77	32.6
A-7	-4	0.14	-0.01	-0.07	-5	6.40	1.031	0.14	-0.44	326	31.38	31.2
A-8	5	0.12	-0.04	-0.33	-19	19.62	1.091	0.13	-0.43	326	29.13	29.0
B-1	3	0.19	-0.02	-0.11	-7	7.61	1.039	0.20	-0.50	330	36.83	36.6
B-2	8	0.18	-0.02	-0.11	-7	10.62	1.039	0.19	-0.49	332	35.59	35.4
B-3	7	0.18	-0.03	-0.17	-10	12.19	1.053	0.19	-0.49	334	35.92	35.7
B-4	2	0.17	-0.01	-0.06	-4	4.47	1.029	0.17	-0.47	335	34.82	34.6
B-5	-1	0.21	-0.01	-0.05	-3	3.16	1.028	0.22	-0.52	335	38.72	38.5
B-6	-4	0.18	-0.02	-0.11	-7	8.06	1.039	0.19	-0.49	332	35.86	35.7
B-7	0	0.16	-0.02	-0.13	-8	8.00	1.044	0.17	-0.47	330	33.93	33.8
B-8	-1	0.15	-0.01	-0.07	-5	5.10	1.031	0.15	-0.45	330	32.63	32.5
						Ri			Ps	TEMP	Vs	Vs
						7.97			-0.48	328.7	34.76	34.58
						avg			avg	avg	avg	avg

MOISTURE = 6.76 %
MD = 0.93
MWD = 30.21
MW = 29.39
Psa = 29.18

O2 % = 7.7
CO2 % = 11.9
N2 % = 80.4

VOLUMETRIC FLOW RATE
Qs = 5,374,266 DSCFH
Qs = 5,765,000 WSCFH
Qa = 8,827,550 ACFH

MOISTURE DATA

ACTUAL TIME	RUN TIME	GAS VOL FT^3	ORIFICE IN. H2O	METER TEMPERATURE INLET	OUTLET	METER Yi	BAR. PRESS. IN. Hg
18:08	0	59.888	1.63	63	62	0.98	29.22
	5	63.2		63	62		
	10	66.8		63	62		
	15	70.5		62	60		
	20	74.1		62	60		
	25	77.6		62	60		
18:38	30	81.256					
		21.368	1.63		62		

VOLUME OF MOISTURE (ml)

IMPINGERS	INITIAL	FINAL	
1	100	122	
2	100	104	
3	0	2	
Gel	260	264	Total
NET	460	492	32

TOTAL MOISTURE (ml) 32

VM(STD)= 20.772
VW(GAS)= 1.507

%MOISTURE = 6.76

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 10
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 18:08
END: 18:18

DATE	TIME	O2	CO2
4/7/04	18:08	8.15	11.56
4/7/04	18:09	7.95	11.63
4/7/04	18:10	7.76	11.82
4/7/04	18:11	7.53	12.13
4/7/04	18:12	7.61	12.1
4/7/04	18:13	7.58	11.9
4/7/04	18:14	7.51	12
4/7/04	18:15	7.74	11.8
4/7/04	18:16	7.69	11.8
4/7/04	18:17	8.28	11.2
4/7/04	18:18	7.91	11.64
		O2	CO2
		7.79	11.78
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.07	0.20	**YES**	0.10	0.32	0.12	**YES**
O2, %	12.42	12.50	0.32	**YES**	12.52	0.40	0.08	**YES**
CO2, %	0.03	0.10	0.35	**YES**	0.13	0.50	0.15	**YES**
CO2, %	10.04	9.95	0.45	**YES**	9.97	0.35	0.10	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	7.8
CO2, %	11.8

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.7	7.2
CO2, %	11.9	11.1

% MOISTURE = **6.76**

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT: **UGI**
PLANT: **Hunlock**
UNIT: **6**
LOAD: Low

RUN: 11
DATE: 4 7 04
TIME START: 18:19
END: 18:29

STACK DIAMETER = 114 in
STACK AREA = 70.9 sq ft
Pb = 29.22 P_{bar}
Ps = -0.30 in Hg
WAF = 0.995

TRAVERSE POINT	YAW ANGLE Y1	PRESSURE (in of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE P1	RESULT ANGLE R1	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
B-1	**2**	**0.19**	**-0.02**	-0.11	**-7**	7.28	**1.039**	0.20	-0.50	**319**	36.60	36.4
B-2	**-3**	**0.19**	**-0.02**	-0.11	**-7**	7.61	**1.039**	0.20	-0.50	**322**	36.64	36.5
B-3	**0**	**0.18**	**-0.01**	-0.06	**-4**	4.00	**1.029**	0.19	-0.49	**323**	35.57	35.4
B-4	**5**	**0.18**	**-0.01**	-0.06	**-4**	6.40	**1.029**	0.19	-0.49	**325**	35.48	35.3
B-5	**-1**	**0.19**	**-0.03**	-0.16	**-10**	10.05	**1.053**	0.20	-0.50	**327**	37.01	36.8
B-6	**-4**	**0.17**	**-0.01**	-0.06	**-4**	5.65	**1.029**	0.17	-0.47	**328**	34.59	34.4
B-7	**3**	**0.16**	**-0.02**	-0.13	**-8**	8.54	**1.044**	0.17	-0.47	**327**	33.81	33.6
B-8	**2**	**0.16**	**-0.02**	-0.13	**-8**	8.24	**1.044**	0.17	-0.47	**325**	33.80	33.6
A-1	**5**	**0.19**	**-0.01**	-0.05	**-3**	5.83	**1.028**	0.20	-0.50	**329**	36.55	36.4
A-2	**8**	**0.19**	**-0.03**	-0.16	**-10**	12.78	**1.053**	0.20	-0.50	**334**	36.81	36.6
A-3	**4**	**0.18**	**-0.01**	-0.06	**-4**	5.65	**1.029**	0.19	-0.49	**336**	35.77	35.6
A-4	**-2**	**0.18**	**-0.02**	-0.11	**-7**	7.28	**1.039**	0.19	-0.49	**332**	35.92	35.7
A-5	**-3**	**0.16**	**-0.04**	-0.25	**-14**	14.31	**1.079**	0.17	-0.47	**332**	34.35	34.2
A-6	**4**	**0.16**	**-0.03**	-0.19	**-11**	11.70	**1.059**	0.17	-0.47	**331**	34.05	33.9
A-7	**2**	**0.16**	**-0.02**	-0.13	**-8**	8.24	**1.044**	0.17	-0.47	**330**	33.90	33.7
A-8	**0**	**0.14**	**-0.01**	-0.07	**-5**	5.00	**1.031**	0.14	-0.44	**329**	31.51	31.3
						R1 8.04 avg			Ps -0.48 avg	TEMP 328.1 avg	Vs 35.15 avg	Vs 34.97 avg

MOISTURE = 6.76 %
MD = 0.93
MWD = 30.22
MW = 29.40
Psa = 29.18

O2 % = 7.6
CO2 % = 12.0
N2 % = 80.4

VOLUMETRIC FLOW RATE
Qs = 5,438,780 DSCFH
Qs = 5,834,000 WSCFH
Qa = 8,926,516 ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 11
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 18:19
END: 18:29

DATE	TIME	O2	CO2
4/7/04	18:19	7.49	12.15
4/7/04	18:20	7.95	11.72
4/7/04	18:21	7.64	11.92
4/7/04	18:22	7.69	11.87
4/7/04	18:23	7.69	11.94
4/7/04	18:24	7.69	11.98
4/7/04	18:25	7.53	11.94
4/7/04	18:26	7.49	11.98
4/7/04	18:27	7.69	11.83
4/7/04	18:28	7.83	11.79
4/7/04	18:29	8.09	11.56
		O2	CO2
		7.71	11.88
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.07	0.20	**YES**	0.10	0.32	0.12	**YES**
O2, %	12.42	12.50	0.32	**YES**	12.52	0.40	0.08	**YES**
CO2, %	0.03	0.10	0.35	**YES**	0.13	0.50	0.15	**YES**
CO2, %	10.04	9.95	0.45	**YES**	9.97	0.35	0.10	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	7.7
CO2, %	11.9

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.6	7.1
CO2, %	12.0	11.2

% MOISTURE = **6.76**

CATALYST AIR MANAGEMENT, Inc.
3-D Flow Profile

CLIENT:	**UGI**	RUN:	12	STACK DIAMETER =	114	in
PLANT:	**Hunlock**	DATE:	4 7 04	STACK AREA =	70.9	sq ft
UNIT:	**6**	TIME START:	18 30	Pb =	29.22	P_{bar}
LOAD:	Low	END:	18:40	Ps =	-0.30	in Hg
				WAF =	0.995	

TRAVERSE POINT	YAW ANGLE Y1	PRESSURE (in of H2O) (P1-P2)	(P4-P5)	PITCH ANGLE COEF (P4-P5)/(P1-P2)	PITCH ANGLE P1	RESULT ANGLE R1	VEL PRESS COEF (Pt-Ps)/(P1-P2)	TRUE VEL PRESS (Pt-Ps)	STATIC PRESS Ps	STACK TEMP F	AXIAL VEL Vs FT/S	WAF VEL Vs FT/S
A-1	**-3**	**0.19**	**-0.03**	-0 16	**-10**	10 44	**1.053**	0 20	-0 50	**330**	37 03	36 8
A-2	**2**	**0.18**	**-0.02**	-0 11	**-7**	7 28	**1.039**	0 19	-0 49	**332**	35 91	35 7
A-3	**5**	**0.18**	**-0.02**	-0 11	**-7**	8 60	**1.039**	0 19	-0 49	**334**	35 84	35 7
A-4	**0**	**0.18**	**-0.01**	-0 06	**-4**	4 00	**1.029**	0 19	-0 49	**336**	35 86	35 7
A-5	**-4**	**0.17**	**-0.01**	-0 06	**-4**	5 65	**1.029**	0 17	-0 47	**332**	34 68	34 5
A-6	**2**	**0.17**	**-0.01**	-0 06	**-4**	4 47	**1.029**	0 17	-0 47	**331**	34 72	34 5
A-7	**6**	**0.14**	**-0.02**	-0 14	**-9**	10 80	**1.048**	0 15	-0 45	**330**	31 60	31 4
A-8	**-1**	**0.12**	**-0.04**	-0 33	**-19**	19 03	**1.091**	0 13	-0 43	**331**	29 33	29 2
B-1	**-5**	**0.19**	**-0.03**	-0 16	**-10**	11 17	**1.053**	0 20	-0 50	**322**	36 75	36 6
B-2	**7**	**0.18**	**-0.02**	-0 11	**-7**	9 89	**1.039**	0 19	-0 49	**324**	35 49	35 3
B-3	**3**	**0.17**	**-0.01**	-0 06	**-4**	5 00	**1.029**	0 17	-0 47	**323**	34 52	34 3
B-4	**2**	**0.18**	**-0.01**	-0 06	**-4**	4 47	**1.029**	0 19	-0 49	**323**	35 54	35 4
B-5	**-4**	**0.20**	**-0.02**	-0 10	**-7**	8 06	**1.039**	0 21	-0 51	**325**	37 62	37 4
B-6	**3**	**0.18**	**-0.03**	-0 17	**-10**	10 44	**1.053**	0 19	-0 49	**326**	35 95	35 8
B-7	**3**	**0.16**	**-0.05**	-0 31	**-18**	18 24	**1.090**	0 17	-0 47	**327**	33 90	33 7
B-8	**-2**	**0.16**	**-0.02**	-0 13	**-8**	8 24	**1.044**	0 17	-0 47	**326**	33 82	33 6
						R1			Ps	TEMP	Vs	Vs
						9 11			-0 48	328 3	34 91	34 73
						avg			avg	avg	avg	avg

MOISTURE =	6 76	%
MD =	0 93	
MWD =	30 23	
MW =	29.40	
Psa =	29 18	

O2 % =	7 7
CO2 % =	12 0
N2 % =	80 3

VOLUMETRIC FLOW RATE

Qs =	5,400,777	DSCFH
Qs =	5,793,000	WSCFH
Qa =	8,866,220	ACFH

CATALYST AIR MANAGEMENT Inc.
REFERENCE DATA

CLIENT: UGI
PLANT: Hunlock
UNIT: 6
TEST: 3A,6C,7E
LOCATION: STACK

RUN #: 12
OPERATING LEVEL: Low
START DATE: 4/7/04
END DATE: 4/7/04
START: 18:30
END: 18:40

DATE	TIME	O2	CO2
4/7/04	18:30	7.74	11.8
4/7/04	18:31	7.51	11.95
4/7/04	18:32	7.46	12.04
4/7/04	18:33	7.47	12.2
4/7/04	18:34	8.21	11.39
4/7/04	18:35	7.5	12.06
4/7/04	18:36	7.76	11.85
4/7/04	18:37	7.79	11.83
4/7/04	18:38	7.89	11.76
4/7/04	18:39	7.67	11.87
4/7/04	18:40	8.22	11.36
		O2	CO2
		7.75	11.83
		%	%

Analyzer Readings not corrected for Post-Test Calibrations.

SYSTEM CALIBRATION BIAS AND DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRE-TEST CHECK	% SPAN	Pass YES\NO	POST-TEST CHECK	% SPAN	% DRIFT	Pass YES\NO
O2, %	0.02	0.07	0.20	**YES**	0.10	0.32	0.12	**YES**
O2, %	12.42	12.50	0.32	**YES**	12.52	0.40	0.08	**YES**
CO2, %	0.03	0.10	0.35	**YES**	0.13	0.50	0.15	**YES**
CO2, %	10.04	9.95	0.45	**YES**	9.97	0.35	0.10	**YES**

UNCORRECTED ANALYZER VALUES

	DRY
O2, %	7.7
CO2, %	11.8

ANALYZER VALUES CORRECTED FOR DRIFT

	DRY	WET
O2, %	7.7	7.2
CO2, %	12.0	11.2

% MOISTURE = **6.76**

APPENDIX 3
PLANT DATA

High Load

Run 1- High l ·d (46 Gross)

Facility Name: H. k Creek Energy Ventures

Location: Hunlock Power S on

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 07:28 to 04/07/2004 07:49, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		
Date	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
04/07/2004	07:28:50	08	47	191	00	0.34	00	3.14	1101	00	2.77	00	25.63	12.30	00	138.50	00	11.24	00	13.96
04/07/2004	07:29:50	08	46	191	00	0.34	00	2.85	1108	00	2.81	00	25.91	12.19	00	138.82	00	6.92	00	13.96
04/07/2004	07:30:50	08	46	165	00	0.30	00	2.83	1109	00	2.85	00	25.54	12.05	00	141.07	00	6.85	00	13.96
04/07/2004	07:31:50	08	46	177	00	0.32	00	3.17	1066	00	2.74	00	24.30	12.02	00	140.64	00	14.48	00	13.96
04/07/2004	07:32:50	08	45	198	00	0.37	00	3.41	1028	00	2.75	00	24.28	11.57	00	141.60	00	7.86	00	13.96
04/07/2004	07:33:50	08	46	200	00	0.37	00	3.29	1054	00	2.76	00	25.03	11.80	00	141.07	00	5.90	00	13.96
04/07/2004	07:34:50	08	46	194	00	0.35	00	3.18	1084	00	2.78	00	25.36	12.06	00	139.68	00	9.39	00	13.96
04/07/2004	07:35:50	08	46	189	00	0.34	00	3.09	1096	00	2.79	00	25.24	12.16	00	138.61	00	37.27	00	13.96
04/07/2004	07:36:51	08	46	184	00	0.33	00	3.05	1117	00	2.80	00	26.67	12.33	00	142.35	00	6.30	00	13.96
04/07/2004	07:37:50	08	46	176	00	0.31	00	2.97	1129	00	2.83	00	26.37	12.33	00	140.64	00	5.46	00	13.96
04/07/2004	07:38:50	08	46	186	00	0.33	00	3.14	1108	00	2.81	00	25.59	12.19	00	140.11	00	5.78	00	13.96
04/07/2004	07:39:50	08	46	190	00	0.34	00	3.16	1095	00	2.79	00	25.36	12.13	00	139.68	00	8.01	00	13.96
04/07/2004	07:40:50	08	46	184	00	0.33	00	3.02	1100	00	2.80	00	25.63	12.14	00	139.89	00	6.27	00	13.96
04/07/2004	07:41:50	08	46	186	00	0.34	00	3.18	1100	00	2.80	00	25.76	12.14	00	141.28	00	5.84	00	13.95
04/07/2004	07:42:50	08	46	191	00	0.35	00	3.17	1087	00	2.80	00	25.18	12.01	00	140.00	00	8.22	00	13.96
04/07/2004	07:43:50	08	46	190	00	0.34	00	3.18	1080	00	2.77	00	25.38	12.05	00	141.07	00	6.44	00	13.95
04/07/2004	07:44:50	08	46	187	00	0.33	00	3.03	1097	00	2.78	00	25.36	12.21	00	138.07	00	7.27	00	13.96
04/07/2004	07:45:50	08	46	188	00	0.34	00	3.14	1093	00	2.79	00	25.11	12.11	00	139.14	00	6.50	00	13.96
04/07/2004	07:46:50	08	46	190	00	0.35	00	3.12	1083	00	2.79	00	24.90	12.01	00	138.72	00	6.56	00	13.96
04/07/2004	07:47:50	08	46	190	00	0.35	00	3.20	1075	00	2.78	00	25.14	11.98	00	141.07	00	6.88	00	13.96
04/07/2004	07:48:50	08	46	188	00	0.34	00	3.04	1083	00	2.77	00	25.13	12.11	00	138.40	00	6.66	00	13.96
04/07/2004	07:49:50	08	46	187	00	0.34	00	3.18	1088	00	2.77	00	25.44	12.16	00	141.07	00	7.12	00	13.96
Report Average:				187		0.34		3.12	1090		2.79		25.38	12.09		140.07		8.78		

PC - Process Codes:

01 - Changing Fuels
02 - Control Equipment Malfunction
03 - Startup
04 - Shutdown
05 - Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Report Printed on: 04/07/2004 07:52:22

Run 2- High l ·d (46 Gross)

Facility Name: Hu ‹ Creek Energy Ventures Location: Hunlock Power S. ·n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 08:05 to 04/07/2004 08:26, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	08:05:50	08	47	186	00	0.33	00	3.09	1108	00	2.81	00	25.59	12.20	00	139.89	00	6.53	00	13.95
4/07/2004	08:06:50	08	47	183	00	0.33	00	3.04	1096	00	2.79	00	25.19	12.15	00	139.25	00	6.11	00	13.95
4/07/2004	08:07:50	08	47	185	00	0.33	00	3.03	1099	00	2.78	00	25.82	12.21	00	139.68	00	6.73	00	13.95
4/07/2004	08:08:50	08	47	179	00	0.32	00	3.02	1124	00	2.81	00	25.99	12.37	00	139.68	00	5.97	00	13.95
4/07/2004	08:09:50	08	47	185	00	0.33	00	3.07	1103	00	2.80	00	25.11	12.17	00	137.97	00	6.62	00	13.95
4/07/2004	08:10:50	08	47	189	00	0.34	00	3.17	1085	00	2.79	00	25.31	12.03	00	140.86	00	5.19	00	13.95
4/07/2004	08:11:50	08	47	189	00	0.34	00	3.12	1082	00	2.78	00	24.98	12.05	00	139.25	00	5.45	00	13.95
4/07/2004	08:12:50	08	47	188	00	0.34	00	3.18	1087	00	2.77	00	26.02	12.15	00	142.57	00	5.86	00	13.95
4/07/2004	08:13:50	08	46	188	00	0.34	00	3.15	1100	00	2.78	00	25.51	12.25	00	140.43	00	6.79	00	13.95
4/07/2004	08:14:50	08	47	189	00	0.34	00	3.17	1098	00	2.79	00	25.79	12.17	00	141.28	00	6.15	00	13.95
4/07/2004	08:15:50	08	47	189	00	0.34	00	3.12	1092	00	2.78	00	24.94	12.13	00	138.72	00	8.50	00	13.95
4/07/2004	08:16:50	08	47	189	00	0.34	00	3.11	1083	00	2.77	00	24.80	12.10	00	137.97	00	6.30	00	13.95
4/07/2004	08:17:50	08	47	188	00	0.34	00	3.09	1093	00	2.77	00	25.86	12.22	00	139.89	00	6.02	00	13.95
4/07/2004	08:18:50	08	46	186	00	0.33	00	3.16	1112	00	2.79	00	26.06	12.32	00	141.93	00	6.22	00	13.95
4/07/2004	08:19:50	08	46	189	00	0.34	00	3.12	1100	00	2.79	00	25.44	12.18	00	138.72	00	5.77	00	13.94
4/07/2004	08:20:50	08	47	191	00	0.34	00	3.10	1094	00	2.79	00	24.50	12.14	00	135.29	00	6.73	00	13.95
4/07/2004	08:21:50	08	46	192	00	0.35	00	3.18	1083	00	2.78	00	25.21	12.05	00	140.64	00	5.91	00	13.95
4/07/2004	08:22:50	08	46	188	00	0.34	00	3.09	1085	00	2.77	00	25.81	12.10	00	141.50	00	6.19	00	13.94
4/07/2004	08:23:50	08	46	185	00	0.33	00	3.10	1103	00	2.78	00	25.44	12.27	00	139.14	00	7.87	00	13.94
4/07/2004	08:24:48	08	46	188	00	0.34	00	3.14	1100	00	2.79	00	25.41	12.21	00	139.89	00	6.07	00	13.94
4/07/2004	08:25:48	08	47	190	00	0.34	00	3.17	1082	00	2.78	00	25.03	12.03	00	140.64	00	6.47	00	13.94
4/07/2004	08:26:50	08	47	190	00	0.34	00	3.16	1079	00	2.77	00	25.13	12.03	00	140.00	00	5.83	00	13.95
port Average:				188		0.34		3.12	1095		2.78		25.41	12.16		139.78		6.33		

C - Process Codes:

1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip
07 - Clean Control Equip
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Report Printed on 04/07/2004 08:22:22

Run 3- High l d (46 Gross)

Facility Name: Hu . Creek Energy Ventures Location: Hunlock Power St. on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 08:41 to 04/07/2004 09:02, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
Date	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	08:41:48	08	47	184	00	0.33	00	3.02	1090	00	2.79	00	25.11	12.09	00	139.04	00	6.38	00	13.96
4/07/2004	08:42:48	08	47	184	00	0.33	00	3.02	1090	00	2.79	00	25.11	12.09	00	139.04	00	5.93	00	13.96
4/07/2004	08:43:48	08	47	184	00	0.33	00	2.98	1090	00	2.79	00	24.83	12.09	00	137.43	00	6.45	00	13.96
4/07/2004	08:44:48	08	47	185	00	0.33	00	3.11	1096	00	2.79	00	25.77	12.15	00	137.97	00	5.22	00	13.96
4/07/2004	08:45:48	08	47	188	00	0.33	00	3.15	1125	00	2.77	00	26.42	12.54	00	142.03	00	5.60	00	13.95
4/07/2004	08:46:48	08	47	188	00	0.33	00	3.11	1115	00	2.78	00	26.01	12.40	00	140.43	00	5.50	00	13.94
4/07/2004	08:47:48	08	47	181	00	0.32	00	3.03	1126	00	2.79	00	26.57	12.49	00	142.03	00	6.38	00	13.95
4/07/2004	08:48:48	08	47	183	00	0.32	00	3.10	1125	00	2.80	00	26.32	12.45	00	141.28	00	5.97	00	13.95
4/07/2004	08:49:49	08	47	186	00	0.33	00	3.04	1120	00	2.81	00	25.24	12.31	00	136.15	00	5.80	00	13.95
4/07/2004	08:50:48	08	47	187	00	0.33	00	3.09	1110	00	2.81	00	25.97	12.21	00	140.64	00	11.36	00	13.95
4/07/2004	08:51:48	08	47	185	00	0.33	00	3.07	1107	00	2.79	00	25.34	12.26	00	138.07	00	5.35	00	13.95
4/07/2004	08:52:49	08	46	186	00	0.33	00	2.96	1109	00	2.78	00	25.58	12.36	00	137.22	00	6.14	00	13.95
4/07/2004	08:53:48	08	46	180	00	0.32	00	3.01	1117	00	2.79	00	25.54	12.37	00	138.61	00	6.47	00	13.94
4/07/2004	08:54:48	08	47	186	00	0.34	00	3.12	1096	00	2.80	00	25.41	12.09	00	140.32	00	6.18	00	13.95
4/07/2004	08:55:48	08	46	188	00	0.34	00	3.12	1089	00	2.80	00	25.24	12.05	00	139.57	00	5.48	00	13.95
4/07/2004	08:56:49	08	47	187	00	0.34	00	3.02	1094	00	2.79	00	24.88	12.12	00	136.79	00	6.29	00	13.95
4/07/2004	08:57:49	08	46	185	00	0.33	00	3.04	1096	00	2.77	00	25.56	12.23	00	140.11	00	8.10	00	13.95
4/07/2004	08:58:49	08	47	179	00	0.32	00	2.84	1117	00	2.80	00	25.44	12.35	00	135.40	00	5.61	00	13.95
4/07/2004	08:59:49	08	46	179	00	0.32	00	2.95	1124	00	2.82	00	25.63	12.35	00	137.86	00	7.65	00	13.95
4/07/2004	09:00:49	08	47	183	00	0.33	00	2.93	1118	00	2.83	00	24.90	12.22	00	134.65	00	14.57	00	13.95
4/07/2004	09:01:49	08	47	182	00	0.33	00	3.09	1110	00	2.82	00	25.87	12.18	00	141.50	00	6.65	00	13.95
4/07/2004	09:02:49	08	47	185	00	0.33	00	3.03	1092	00	2.78	00	25.38	12.13	00	139.79	00	7.78	00	13.95
Report Average:				184		0.33		3.04	1107		2.80		25.55	12.25		138.91		6.86		

CO
CO

C - Process Codes:
1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 4- High ! d (46 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power Station Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 09:17 to 04/07/2004 09:38, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	09:17:49	08	46	182	00	0.32	00	2.98	1117	00	2.78	00	25.36	12.41	00	136.68	00	6.57	00	13.95
4/07/2004	09:18:49	08	46	185	00	0.33	00	3.04	1118	00	2.80	00	25.68	12.37	00	138.61	00	6.04	00	13.95
4/07/2004	09:19:49	08	47	185	00	0.33	00	3.14	1107	00	2.81	00	25.79	12.18	00	141.28	00	5.34	00	13.95
4/07/2004	09:20:49	08	47	187	00	0.34	00	3.14	1097	00	2.80	00	25.73	12.13	00	141.28	00	7.83	00	13.95
4/07/2004	09:21:49	08	47	186	00	0.33	00	2.97	1101	00	2.78	00	25.49	12.23	00	137.65	00	5.68	00	13.95
4/07/2004	09:22:49	08	46	179	00	0.32	00	3.05	1124	00	2.80	00	25.92	12.42	00	139.79	00	7.48	00	13.95
4/07/2004	09:23:49	08	47	186	00	0.33	00	3.09	1107	00	2.80	00	25.36	12.23	00	138.61	00	6.50	00	13.95
4/07/2004	09:24:49	08	47	187	00	0.34	00	3.10	1095	00	2.79	00	25.61	12.14	00	140.75	00	6.27	00	13.95
4/07/2004	09:25:49	08	47	186	00	0.34	00	3.05	1096	00	2.79	00	25.24	12.14	00	138.40	00	5.76	00	13.95
4/07/2004	09:26:49	08	47	184	00	0.33	00	2.92	1109	00	2.80	00	26.24	12.25	00	138.61	00	5.24	00	13.95
4/07/2004	09:27:49	08	47	177	00	0.31	00	3.01	1140	00	2.83	00	26.36	12.47	00	139.79	00	6.13	00	13.96
4/07/2004	09:28:49	08	47	183	00	0.32	00	3.04	1125	00	2.83	00	25.49	12.30	00	138.40	00	7.61	00	13.95
4/07/2004	09:29:49	08	47	186	00	0.34	00	3.12	1099	00	2.80	00	25.34	12.12	00	139.89	00	5.16	00	13.96
4/07/2004	09:30:49	08	47	187	00	0.34	00	3.14	1089	00	2.77	00	25.63	12.14	00	141.28	00	5.81	00	13.95
4/07/2004	09:31:49	08	46	184	00	0.33	00	2.98	1111	00	2.79	00	25.94	12.31	00	139.14	00	6.93	00	13.95
4/07/2004	09:32:49	08	47	182	00	0.32	00	3.08	1120	00	2.79	00	26.04	12.42	00	140.00	00	6.37	00	13.95
4/07/2004	09:33:49	08	46	185	00	0.33	00	3.05	1115	00	2.81	00	25.51	12.28	00	138.93	00	5.32	00	13.95
4/07/2004	09:34:49	08	47	187	00	0.34	00	3.01	1100	00	2.80	00	24.36	12.17	00	133.48	00	6.24	00	13.95
4/07/2004	09:35:49	08	47	190	00	0.34	00	3.18	1099	00	2.78	00	25.99	12.23	00	141.50	00	5.98	00	13.95
4/07/2004	09:36:49	08	46	184	00	0.32	00	3.04	1117	00	2.79	00	26.52	12.38	00	141.50	00	7.20	00	13.95
4/07/2004	09:37:49	08	46	182	00	0.32	00	3.04	1124	00	2.81	00	25.63	12.38	00	138.40	00	5.76	00	13.95
4/07/2004	09:38:49	08	46	185	00	0.33	00	3.09	1115	00	2.79	00	25.71	12.34	00	140.00	00	5.67	00	13.95
Report Average:				185		0.33		3.06	1110		2.80		25.68	12.27		139.27		6.22		

PC - Process Codes:

01 - Changing Fuels
02 - Control Equipment Malfunction
03 - Startup
04 - Shutdown
05 - Process Down
06 - Clean Process Equip
07 - Clean Control Equip
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 5 - High ' d (46 Gross)

Facility Name: Hun. . x Creek Energy Ventures Location: Hunlock Power Station Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 09:52 to 04/07/2004 10:13, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
07/2004	09:52:49	08	47	184	00	0.33	00	3.01	1118	00	2.83	00	25.44	12.24	00	137.65	00	6.83	00	13.94
/07/2004	09:53:49	08	47	186	00	0.33	00	3.20	1103	00	2.81	00	26.34	12.15	00	143.85	00	8.57	00	13.93
/07/2004	09:54:49	08	47	182	00	0.32	00	2.99	1113	00	2.81	00	25.79	12.26	00	139.47	00	6.80	00	13.94
07/2004	09:55:49	08	47	182	00	0.32	00	3.05	1118	00	2.81	00	25.87	12.29	00	139.89	00	6.00	00	13.94
07/2004	09:56:49	08	47	185	00	0.33	00	3.10	1105	00	2.82	00	25.68	12.13	00	140.32	00	6.25	00	13.94
/07/2004	09:57:49	08	47	186	00	0.34	00	3.03	1095	00	2.80	00	24.98	12.11	00	137.11	00	5.87	00	13.94
/07/2004	09:58:49	08	46	184	00	0.33	00	2.96	1104	00	2.81	00	25.71	12.17	00	137.86	00	5.50	00	13.93
/07/2004	09:59:49	08	46	181	00	0.32	00	3.01	1120	00	2.83	00	25.69	12.25	00	138.29	00	5.72	00	13.94
/07/2004	10:00:49	08	47	183	00	0.33	00	3.09	1118	00	2.82	00	26.26	12.27	00	141.71	00	5.83	00	13.94
/07/2004	10:01:49	08	47	184	00	0.33	00	3.10	1108	00	2.81	00	25.38	12.21	00	139.89	00	8.19	00	13.93
/07/2004	10:02:49	08	47	187	00	0.34	00	3.03	1091	00	2.79	00	25.31	12.11	00	138.61	00	5.79	00	13.94
/07/2004	10:03:49	08	46	182	00	0.33	00	3.03	1098	00	2.79	00	25.46	12.16	00	139.57	00	5.69	00	13.93
/07/2004	10:04:49	08	46	182	00	0.33	00	3.07	1098	00	2.80	00	25.76	12.15	00	141.07	00	6.43	00	13.93
/07/2004	10:05:49	08	46	184	00	0.33	00	3.08	1102	00	2.80	00	25.61	12.17	00	140.00	00	6.07	00	13.93
/07/2004	10:06:49	08	47	183	00	0.33	00	2.98	1097	00	2.79	00	25.11	12.15	00	138.29	00	5.39	00	13.93
/07/2004	10:07:49	08	47	179	00	0.32	00	2.87	1107	00	2.81	00	26.07	12.20	00	139.14	00	5.95	00	13.93
/07/2004	10:08:49	08	47	174	00	0.31	00	2.79	1134	00	2.83	00	25.79	12.39	00	135.83	00	7.16	00	13.93
/07/2004	10:09:49	08	47	171	00	0.30	00	2.87	1143	00	2.83	00	25.79	12.49	00	138.72	00	8.96	00	13.93
/07/2004	10:10:49	08	47	179	00	0.32	00	2.96	1094	00	2.79	00	24.23	12.13	00	136.15	00	5.21	00	13.93
/07/2004	10:11:49	08	46	183	00	0.33	00	2.97	1074	00	2.78	00	24.94	11.97	00	137.86	00	5.62	00	13.93
/07/2004	10:12:49	08	46	181	00	0.32	00	2.98	1097	00	2.78	00	25.19	12.21	00	138.40	00	5.79	00	13.93
/07/2004	10:13:49	08	46	184	00	0.33	00	3.07	1102	00	2.79	00	25.53	12.20	00	139.57	00	6.60	00	13.93
eport Average:				182		0.33		3.01	1106		2.81		25.54	12.20		139.06		6.37		

C - Process Codes:

- - Changing Fuels
- - Control Equipment Malfunction
- - Startup
- - Shutdown
- - Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 6 - High ' 'd (46 Gross)

Facility Name: Hu .: Creek Energy Ventures Location: Hunlock Power St...on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 10:28 to 04/07/2004 10:49, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	10:28:49	08	47	177	00	0.32	00	2.93	1082	00	2.76	00	24.90	12.12	00	139.25	00	6.02	00	13.92
4/07/2004	10:29:49	08	47	178	00	0.32	00	2.98	1077	00	2.75	00	24.93	12.10	00	140.32	00	5.62	00	13.92
4/07/2004	10:30:49	08	47	175	00	0.32	00	2.89	1078	00	2.75	00	25.76	12.13	00	141.50	00	6.44	00	13.92
4/07/2004	10:31:49	08	46	171	00	0.30	00	2.91	1104	00	2.76	00	26.32	12.36	00	142.89	00	6.53	00	13.92
4/07/2004	10:32:49	08	46	174	00	0.31	00	2.84	1110	00	2.78	00	24.78	12.37	00	136.04	00	6.41	00	13.92
4/07/2004	10:33:49	08	47	179	00	0.32	00	3.03	1087	00	2.76	00	24.80	12.19	00	140.43	00	8.60	00	13.92
4/07/2004	10:34:49	08	47	183	00	0.33	00	3.03	1058	00	2.72	00	24.68	12.03	00	140.53	00	5.34	00	13.92
4/07/2004	10:35:49	08	47	174	00	0.31	00	2.84	1079	00	2.74	00	24.88	12.17	00	137.75	00	5.12	00	13.92
4/07/2004	10:36:49	08	47	177	00	0.32	00	2.99	1086	00	2.75	00	25.36	12.21	00	140.11	00	7.79	00	13.92
4/07/2004	10:37:49	08	46	179	00	0.32	00	2.89	1087	00	2.76	00	24.46	12.17	00	135.83	00	5.78	00	13.93
4/07/2004	10:38:49	08	47	178	00	0.32	00	2.93	1084	00	2.75	00	25.44	12.17	00	140.64	00	5.42	00	13.92
4/07/2004	10:39:49	08	47	174	00	0.31	00	2.85	1097	00	2.77	00	24.81	12.24	00	136.04	00	5.51	00	13.92
4/07/2004	10:40:49	08	47	178	00	0.32	00	3.01	1099	00	2.77	00	25.86	12.28	00	141.71	00	5.71	00	13.92
4/07/2004	10:41:49	08	47	179	00	0.32	00	2.99	1099	00	2.75	00	25.13	12.35	00	139.57	00	6.99	00	13.92
4/07/2004	10:42:49	08	47	179	00	0.32	00	2.89	1081	00	2.75	00	24.86	12.18	00	138.40	00	5.97	00	13.92
4/07/2004	10:43:49	08	46	176	00	0.32	00	2.98	1081	00	2.75	00	25.34	12.15	00	141.93	00	5.56	00	13.92
4/07/2004	10:44:49	08	46	179	00	0.32	00	2.98	1074	00	2.74	00	24.61	12.12	00	139.14	00	5.63	00	13.92
4/07/2004	10:45:49	08	46	180	00	0.33	00	2.95	1068	00	2.73	00	24.78	12.08	00	139.04	00	5.63	00	13.92
4/07/2004	10:46:49	08	46	176	00	0.31	00	2.89	1085	00	2.74	00	25.24	12.23	00	139.04	00	5.16	00	13.92
4/07/2004	10:47:49	08	46	178	00	0.32	00	2.96	1092	00	2.78	00	25.09	12.16	00	138.40	00	5.03	00	13.92
4/07/2004	10:48:49	08	46	182	00	0.33	00	3.04	1084	00	2.76	00	25.11	12.13	00	139.89	00	6.07	00	13.93
4/07/2004	10:49:49	08	46	179	00	0.32	00	2.90	1086	00	2.76	00	25.74	12.16	00	140.75	00	6.72	00	13.93
port Average:				178		0.32		2.94	1085		2.75		25.13	12.19		139.51		6.05		

C - Process Codes:

- 1 - Changing Fuels
- 2 - Control Equipment Malfunction
- 3 - Startup
- 4 - Shutdown
- 5 - Process Down
- 06 - Clean Process Equip
- 07 - Clean Control Equip
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 7 - High l d (46 Gross)

Facility Name: Hu. . Creek Energy Ventures Location: Hunlock Power St...on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 11:05 to 04/07/2004 11:26, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	11:05:49	08	47	178	00	0.32	00	2.93	1099	00	2.79	00	25.63	12.20	00	139.79	00	5.24	00	13.93
4/07/2004	11:06:49	08	47	179	00	0.32	00	2.98	1104	00	2.78	00	25.21	12.27	00	138.07	00	6.96	00	13.93
4/07/2004	11:07:49	08	47	179	00	0.32	00	2.92	1098	00	2.77	00	25.49	12.26	00	139.79	00	5.29	00	13.93
4/07/2004	11:08:49	08	46	179	00	0.32	00	2.92	1089	00	2.76	00	24.55	12.19	00	136.04	00	5.59	00	13.93
4/07/2004	11:09:49	08	46	180	00	0.32	00	3.04	1083	00	2.76	00	25.44	12.14	00	141.50	00	6.54	00	13.94
4/07/2004	11:10:49	08	46	182	00	0.33	00	3.07	1085	00	2.77	00	25.48	12.13	00	141.50	00	6.32	00	13.93
4/07/2004	11:11:50	08	47	182	00	0.33	00	3.04	1090	00	2.76	00	25.54	12.21	00	141.07	00	5.52	00	13.93
4/07/2004	11:12:49	08	47	181	00	0.32	00	3.03	1102	00	2.78	00	26.56	12.26	00	143.32	00	6.77	00	13.93
4/07/2004	11:13:49	08	46	177	00	0.31	00	2.91	1107	00	2.78	00	24.55	12.31	00	135.51	00	5.71	00	13.94
4/07/2004	11:14:49	08	46	184	00	0.33	00	3.15	1077	00	2.77	00	25.34	12.04	00	142.78	00	6.49	00	13.94
4/07/2004	11:15:49	08	47	184	00	0.33	00	2.95	1082	00	2.78	00	24.45	12.03	00	135.51	00	5.81	00	13.94
4/07/2004	11:16:49	08	47	182	00	0.33	00	3.03	1094	00	2.79	00	25.63	12.11	00	140.43	00	5.30	00	13.93
4/07/2004	11:17:49	08	47	179	00	0.32	00	2.84	1106	00	2.80	00	25.46	12.22	00	136.90	00	5.24	00	13.93
4/07/2004	11:18:49	08	47	173	00	0.31	00	2.89	1131	00	2.84	00	26.19	12.30	00	139.68	00	6.04	00	13.94
/07/2004	11:19:49	08	47	177	00	0.31	00	2.90	1129	00	2.84	00	25.51	12.31	00	136.36	00	5.33	00	13.93
/07/2004	11:20:49	08	47	183	00	0.33	00	3.09	1119	00	2.84	00	26.07	12.20	00	140.75	00	6.27	00	13.94
/07/2004	11:21:49	08	47	184	00	0.33	00	3.05	1106	00	2.81	00	25.38	12.18	00	138.93	00	5.88	00	13.94
/07/2004	11:22:50	08	47	181	00	0.32	00	2.89	1108	00	2.80	00	25.38	12.24	00	136.79	00	7.11	00	13.94
/07/2004	11:23:49	08	47	173	00	0.30	00	2.80	1139	00	2.85	00	26.24	12.38	00	138.18	00	6.10	00	13.94
/07/2004	11:24:49	08	47	172	00	0.30	00	2.82	1138	00	2.84	00	25.36	12.38	00	134.97	00	5.38	00	13.94
/07/2004	11:25:49	08	47	179	00	0.32	00	2.99	1119	00	2.84	00	25.96	12.21	00	140.00	00	5.78	00	13.94
/07/2004	11:26:50	08	47	179	00	0.32	00	3.01	1114	00	2.82	00	25.97	12.21	00	140.64	00	5.03	00	13.94
eport Average:				179		0.32		2.97	1105		2.80		25.52	12.22		139.02		5.90		

92

C - Process Codes:

- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 8 - High ' ıd (46 Gross)

Facility Name: Ht (Creek Energy Ventures Location: Hunlock Power S. ..on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 11:43 to 04/07/2004 12:04, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ıate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	11:43:50	08	47	167	00	0.29	00	2.80	1159	00	2.89	00	26.85	12.40	00	139.89	00	5.28	00	13.94
4/07/2004	11:44:50	08	47	172	00	0.31	00	2.87	1132	00	2.86	00	25.28	12.26	00	137.43	00	5.28	00	13.94
4/07/2004	11:45:50	08	47	178	00	0.32	00	2.99	1095	00	2.83	00	25.77	11.97	00	141.50	00	6.23	00	13.94
4/07/2004	11:46:50	08	46	172	00	0.31	00	2.79	1117	00	2.85	00	26.06	12.12	00	139.04	00	6.24	00	13.94
4/07/2004	11:47:50	08	47	169	00	0.30	00	2.76	1130	00	2.88	00	25.77	12.14	00	136.90	00	4.79	00	13.94
4/07/2004	11:48:50	08	47	171	00	0.31	00	2.80	1137	00	2.89	00	26.37	12.19	00	139.25	00	6.52	00	13.94
4/07/2004	11:49:50	08	47	170	00	0.30	00	2.79	1141	00	2.89	00	26.32	12.20	00	138.61	00	5.73	00	13.94
4/07/2004	11:50:50	08	47	169	00	0.30	00	2.83	1147	00	2.89	00	26.89	12.27	00	140.96	00	5.51	00	13.94
4/07/2004	11:51:50	08	46	170	00	0.30	00	2.82	1145	00	2.90	00	26.41	12.23	00	139.04	00	5.14	00	13.94
4/07/2004	11:52:50	08	47	171	00	0.30	00	2.82	1143	00	2.89	00	26.31	12.25	00	139.68	00	5.65	00	13.94
4/07/2004	11:53:50	08	47	170	00	0.31	00	2.89	1123	00	2.87	00	26.11	12.11	00	140.86	00	4.98	00	13.94
4/07/2004	11:54:50	08	47	173	00	0.31	00	2.83	1115	00	2.86	00	26.21	12.05	00	140.43	00	6.32	00	13.94
4/07/2004	11:55:50	08	47	169	00	0.30	00	2.80	1131	00	2.88	00	26.26	12.13	00	139.89	00	5.82	00	13.94
4/07/2004	11:56:50	08	47	169	00	0.30	00	2.78	1136	00	2.90	00	25.97	12.13	00	138.18	00	5.22	00	13.94
4/07/2004	11:57:50	08	47	170	00	0.31	00	2.86	1129	00	2.89	00	26.19	12.09	00	140.53	00	5.15	00	13.94
4/07/2004	11:58:50	08	47	171	00	0.31	00	2.83	1121	00	2.87	00	25.94	12.08	00	139.14	00	4.65	00	13.94
4/07/2004	11:59:50	08	47	169	00	0.30	00	2.78	1131	00	2.89	00	26.80	12.09	00	140.96	00	5.27	00	13.93
4/07/2004	12:00:50	08	47	164	00	0.29	00	2.68	1153	00	2.91	00	26.17	12.26	00	136.47	00	5.79	00	13.93
4/07/2004	12:01:50	08	47	167	00	0.30	00	2.82	1150	00	2.92	00	26.56	12.17	00	140.53	00	5.46	00	13.94
4/07/2004	12:02:50	08	47	169	00	0.30	00	2.78	1138	00	2.91	00	25.71	12.11	00	136.47	00	5.44	00	13.94
4/07/2004	12:03:50	08	47	172	00	0.31	00	2.86	1133	00	2.89	00	26.19	12.13	00	139.68	00	4.55	00	13.94
4/07/2004	12:04:50	08	47	172	00	0.31	00	2.79	1138	00	2.89	00	26.39	12.20	00	138.72	00	5.75	00	13.94
ıport Average:				170		0.30		2.82	1134		2.88		26.21	12.16		139.28		5.49		

C - Process Codes:
1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip
07 - Clean Control Equip
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 9 - High l d (46 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power St. Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 12:17 to 04/07/2004 12:38, Report Averages: 1-Minute Averages, Number of Avgs: 22

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	12:17:50	08	47	176	00	0.32	00	2.87	1139	00	2.91	00	25.89	12.12	00	137.43	00	5.55	00	13.93
4/07/2004	12:18:50	08	47	174	00	0.31	00	2.84	1133	00	2.90	00	25.96	12.08	00	138.50	00	5.36	00	13.93
4/07/2004	12:19:50	08	47	172	00	0.31	00	2.82	1145	00	2.90	00	26.95	12.19	00	139.79	00	6.63	00	13.93
4/07/2004	12:20:50	08	47	168	00	0.30	00	2.83	1170	00	2.94	00	27.40	12.32	00	141.39	00	6.05	00	13.93
4/07/2004	12:21:50	08	47	170	00	0.31	00	2.97	1149	00	2.93	00	27.12	12.13	00	143.85	00	5.32	00	13.93
4/07/2004	12:22:50	08	47	174	00	0.32	00	2.90	1124	00	2.90	00	25.92	12.00	00	139.47	00	5.43	00	13.94
4/07/2004	12:23:50	08	47	174	00	0.32	00	2.93	1125	00	2.89	00	26.54	12.04	00	141.60	00	4.91	00	13.93
4/07/2004	12:24:50	08	47	174	00	0.31	00	2.79	1140	00	2.90	00	26.75	12.15	00	139.47	00	5.61	00	13.93
4/07/2004	12:25:50	08	47	168	00	0.30	00	2.82	1162	00	2.94	00	27.10	12.22	00	140.53	00	5.80	00	13.93
4/07/2004	12:26:50	08	47	169	00	0.30	00	2.73	1153	00	2.94	00	26.01	12.11	00	136.26	00	5.82	00	13.93
4/07/2004	12:27:50	08	47	169	00	0.30	00	2.78	1158	00	2.94	00	26.26	12.18	00	137.01	00	6.40	00	13.94
4/07/2004	12:28:50	08	47	171	00	0.31	00	2.78	1153	00	2.93	00	26.60	12.15	00	137.97	00	5.16	00	13.93
4/07/2004	12:29:50	08	47	170	00	0.30	00	2.78	1165	00	2.95	00	26.56	12.23	00	137.33	00	5.99	00	13.93
4/07/2004	12:30:50	08	46	171	00	0.31	00	2.83	1161	00	2.96	00	26.77	12.14	00	139.57	00	5.73	00	13.94
4/07/2004	12:31:50	08	46	170	00	0.31	00	2.80	1154	00	2.95	00	26.69	12.11	00	138.93	00	5.47	00	13.94
4/07/2004	12:32:50	08	46	171	00	0.31	00	2.85	1152	00	2.94	00	26.56	12.12	00	138.72	00	6.02	00	13.94
4/07/2004	12:33:50	08	46	171	00	0.31	00	2.78	1159	00	2.95	00	27.19	12.16	00	139.57	00	6.35	00	13.94
4/07/2004	12:34:50	08	46	168	00	0.30	00	2.80	1178	00	2.97	00	27.29	12.25	00	140.00	00	5.27	00	13.93
4/07/2004	12:35:50	08	46	171	00	0.31	00	2.78	1155	00	2.97	00	25.94	12.04	00	136.04	00	5.56	00	13.93
4/07/2004	12:36:50	08	47	172	00	0.31	00	2.85	1149	00	2.95	00	26.60	12.05	00	139.25	00	5.15	00	13.93
4/07/2004	12:37:50	08	47	174	00	0.31	00	2.84	1157	00	2.95	00	26.32	12.14	00	137.01	00	5.69	00	13.93
4/07/2004	12:38:50	08	47	172	00	0.31	00	2.77	1166	00	2.97	00	26.85	12.15	00	138.18	00	6.42	00	13.94
eport Average:				171		0.31		2.82	1152		2.94		26.60	12.14		138.99		5.71		

14

C - Process Codes:
1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Mid Load

Run 1 - Mid Load (36 Gross)

Facility Name: H k Creek Energy Ventures

Location: Hunlock Power , n

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 13:25 to 04/07/2004 13:35, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
Date	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
04/07/2004	13:25:48	08	36	158	00	0.29	00	2.22	995	00	2.63	00	19.55	11.68	00	118.82	00	3.54	00	13.95
04/07/2004	13:26:49	08	36	154	00	0.29	00	2.21	991	00	2.61	00	19.88	11.72	00	121.28	00	4.52	00	13.95
04/07/2004	13:27:48	08	37	156	00	0.29	00	2.20	973	00	2.59	00	18.62	11.62	00	116.36	00	3.23	00	13.95
04/07/2004	13:28:48	08	36	161	00	0.30	00	2.22	970	00	2.57	00	18.82	11.66	00	115.51	00	3.75	00	13.95
04/07/2004	13:29:48	08	36	157	00	0.29	00	2.16	988	00	2.57	00	18.92	11.88	00	116.26	00	3.74	00	13.95
04/07/2004	13:30:49	08	36	164	00	0.31	00	2.34	968	00	2.58	00	18.87	11.58	00	118.40	00	3.61	00	13.95
04/07/2004	13:31:49	08	36	166	00	0.31	00	2.29	961	00	2.56	00	18.74	11.60	00	116.68	00	3.89	00	13.95
04/07/2004	13:32:49	08	36	160	00	0.29	00	2.23	978	00	2.54	00	19.20	11.88	00	118.72	00	3.86	00	13.95
04/07/2004	13:33:49	08	36	164	00	0.31	00	2.33	958	00	2.54	00	18.92	11.66	00	118.93	00	5.37	00	13.95
04/07/2004	13:34:48	08	36	165	00	0.31	00	2.32	954	00	2.53	00	18.67	11.65	00	117.65	00	3.73	00	13.95
04/07/2004	13:35:49	08	36	161	00	0.30	00	2.16	963	00	2.52	00	18.59	11.83	00	114.97	00	5.41	00	13.95
Report Average:				161		0.30		2.24	973		2.57		18.98	11.71		117.60		4.06		

C - Process Codes:

1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

eport Printed on: 04/07/2004 14:02:18

Run 2 - Mid l d (36 Gross)

Facility Name: Hu (Creek Energy Ventures

Location: Hunlock Power Station

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 13:36 to 04/07/2004 13:46, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	13:36:48	08	36	163	00	0.30	00	2.32	959	00	2.52	00	18.42	11.78	00	117.43	00	4.23	00	13.95
4/07/2004	13:37:48	08	36	164	00	0.30	00	2.23	952	00	2.51	00	18.55	11.74	00	117.01	00	4.13	00	13.95
4/07/2004	13:38:49	08	36	163	00	0.30	00	2.32	944	00	2.50	00	17.71	11.68	00	116.26	00	3.63	00	13.95
4/07/2004	13:39:49	08	36	169	00	0.32	00	2.32	920	00	2.47	00	18.24	11.50	00	116.90	00	3.89	00	13.95
4/07/2004	13:40:49	08	36	163	00	0.30	00	2.28	943	00	2.47	00	18.34	11.80	00	117.86	00	4.05	00	13.95
4/07/2004	13:41:49	08	36	161	00	0.30	00	2.20	941	00	2.47	00	18.22	11.79	00	117.01	00	4.77	00	13.95
4/07/2004	13:42:49	08	36	164	00	0.31	00	2.34	920	00	2.46	00	17.67	11.57	00	116.90	00	3.99	00	13.95
4/07/2004	13:43:49	08	36	167	00	0.31	00	2.33	916	00	2.43	00	18.06	11.64	00	117.65	00	3.97	00	13.95
4/07/2004	13:44:49	08	36	167	00	0.31	00	2.28	922	00	2.42	00	17.91	11.76	00	116.58	00	4.07	00	13.95
4/07/2004	13:45:49	08	37	160	00	0.29	00	2.29	928	00	2.42	00	18.26	11.86	00	120.64	00	4.06	00	13.95
4/07/2004	13:46:49	08	36	167	00	0.32	00	2.40	901	00	2.41	00	17.89	11.54	00	119.57	00	4.51	00	13.95
Report Average:				164		0.31		2.30	931		2.46		18.12	11.70		117.62		4.12		

: - Process Codes:

- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 3 - Mid L ^ad (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power S n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 13:47 to 04/07/2004 13:57, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	13:47:49	08	36	169	00	0.32	00	2.39	903	00	2.41	00	17.82	11.61	00	119.04	00	3.86	00	13.95
4/07/2004	13:48:49	08	36	167	00	0.31	00	2.32	909	00	2.39	00	18.17	11.75	00	119.25	00	5.83	00	13.96
4/07/2004	13:49:49	08	36	164	00	0.30	00	2.34	913	00	2.39	00	17.64	11.79	00	118.40	00	5.21	00	13.95
4/07/2004	13:50:49	08	36	168	00	0.32	00	2.35	892	00	2.39	00	17.57	11.54	00	117.97	00	4.31	00	13.95
4/07/2004	13:51:49	08	36	166	00	0.31	00	2.32	905	00	2.38	00	17.66	11.78	00	117.65	00	3.99	00	13.96
4/07/2004	13:52:49	08	37	163	00	0.30	00	2.17	899	00	2.37	00	17.08	11.74	00	113.80	00	4.06	00	13.96
4/07/2004	13:53:49	08	36	158	00	0.29	00	2.20	906	00	2.38	00	17.38	11.76	00	116.58	00	4.38	00	13.95
/07/2004	13:54:49	08	36	159	00	0.30	00	2.11	897	00	2.36	00	17.09	11.73	00	113.90	00	4.80	00	13.95
/07/2004	13:55:49	08	36	154	00	0.29	00	2.24	898	00	2.36	00	17.46	11.78	00	119.68	00	3.62	00	13.95
/07/2004	13:56:49	08	36	160	00	0.30	00	2.20	878	00	2.34	00	17.26	11.58	00	117.22	00	4.24	00	13.95
/07/2004	13:57:49	08	36	161	00	0.30	00	2.29	882	00	2.36	00	17.34	11.58	00	118.82	00	4.79	00	13.95
eport Average:				163		0.30		2.27	898		2.38		17.50	11.69		117.48		4.46		

: - Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 14:07:24

Run 4- Mid L· ·l (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power St. n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 14:04 to 04/07/2004 14:14, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	14:04:49	08	36	172	00	0.32	00	2.48	881	00	2.34	00	17.52	11.66	00	120.11	00	4.71	00	13.94
/07/2004	14:05:49	08	36	173	00	0.33	00	2.51	877	00	2.34	00	17.72	11.61	00	122.25	00	4.65	00	13.94
07/2004	14:06:49	08	36	175	00	0.33	00	2.57	870	00	2.34	00	17.74	11.51	00	122.99	00	4.18	00	13.94
07/2004	14:07:49	08	36	173	00	0.32	00	2.42	874	00	2.31	00	17.16	11.68	00	118.93	00	3.95	00	13.94
07/2004	14:08:49	08	36	172	00	0.33	00	2.41	862	00	2.32	00	17.38	11.49	00	119.79	00	3.93	00	13.94
07/2004	14:09:49	08	36	168	00	0.32	00	2.41	872	00	2.34	00	17.18	11.53	00	119.68	00	4.18	00	13.94
07/2004	14:10:49	08	36	172	00	0.33	00	2.46	867	00	2.33	00	17.38	11.49	00	119.79	00	3.78	00	13.95
07/2004	14:11:49	08	36	173	00	0.32	00	2.47	876	00	2.32	00	17.51	11.65	00	119.79	00	4.10	00	13.94
07/2004	14:12:49	08	36	172	00	0.32	00	0.00	884	00	2.33	00	0.06	11.75	00	0.43	00	4.87	00	13.94
07/2004	14:13:49	08	36	169	00	0.31	00	2.60	889	00	2.34	00	18.45	11.76	00	127.59	00	4.68	00	13.94
07/2004	14:14:49	08	37	173	00	0.33	00	2.34	874	00	2.36	00	17.14	11.47	00	116.90	00	4.04	00	13.94
eport Average:				172		0.32		2.24	875		2.33		15.93	11.60		109.84		4.28		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 5 - Mid L l (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power Sta..on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 14:15 to 04/07/2004 14:25, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
l/07/2004	14:15:49	08	36	174	00	0.34	00	2.46	870	00	2.37	00	16.68	11.35	00	116.90	00	4.08	00	13.95
l/07/2004	14:16:49	08	36	168	00	0.32	00	2.24	871	00	2.31	00	16.91	11.66	00	115.94	00	4.20	00	13.94
l/07/2004	14:17:49	08	36	165	00	0.31	00	2.34	874	00	2.35	00	16.51	11.49	00	116.90	00	4.50	00	13.94
l/07/2004	14:18:49	08	36	167	00	0.32	00	2.28	863	00	2.32	00	17.96	11.48	00	119.89	00	4.71	00	13.94
l/07/2004	14:19:49	08	36	161	00	0.31	00	2.28	868	00	2.39	00	16.03	11.24	00	114.44	00	3.99	00	13.94
l/07/2004	14:20:49	08	36	165	00	0.31	00	2.29	857	00	2.31	00	16.79	11.46	00	117.01	00	4.35	00	13.94
/07/2004	14:21:49	08	37	162	00	0.30	00	2.21	870	00	2.31	00	17.18	11.66	00	117.01	00	4.14	00	13.94
/07/2004	14:22:49	08	35	162	00	0.30	00	2.26	881	00	2.33	00	16.79	11.68	00	115.29	00	4.25	00	13.95
/07/2004	14:23:49	08	37	164	00	0.31	00	2.26	877	00	2.33	00	16.89	11.64	00	116.36	00	3.90	00	13.94
/07/2004	14:24:49	08	37	159	00	0.29	00	2.17	880	00	2.31	00	17.24	11.77	00	116.90	00	4.10	00	13.94
/07/2004	14:25:49	08	37	158	00	0.30	00	2.24	875	00	2.34	00	16.23	11.55	00	116.90	00	3.59	00	13.94
eport Average:				164		0.31		2.28	871		2.33		16.84	11.54		116.69		4.16		

: - Process Codes:

- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004

Run 6 - Mid L l (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power St n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 14:26 to 04/07/2004 14:36, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	14:26:49	08	37	162	00	0.31	00	2.16	847	00	2.29	00	17.28	11.43	00	116.79	00	3.67	00	13.94
4/07/2004	14:27:49	08	37	153	00	0.28	00	2.20	903	00	2.34	00	17.57	11.93	00	118.18	00	3.78	00	13.93
4/07/2004	14:28:49	08	37	157	00	0.29	00	2.17	894	00	2.33	00	17.56	11.87	00	118.07	00	3.86	00	13.93
4/07/2004	14:29:49	08	37	153	00	0.28	00	2.13	898	00	2.33	00	17.26	11.94	00	116.26	00	3.78	00	13.93
4/07/2004	14:30:49	08	37	152	00	0.28	00	2.10	900	00	2.33	00	17.09	11.93	00	115.72	00	4.16	00	13.93
4/07/2004	14:31:49	08	37	158	00	0.29	00	2.24	883	00	2.32	00	17.09	11.79	00	116.90	00	3.55	00	13.93
/07/2004	14:32:49	08	37	158	00	0.29	00	2.16	891	00	2.31	00	17.47	11.91	00	117.65	00	4.17	00	13.93
/07/2004	14:33:49	08	37	155	00	0.28	00	2.14	890	00	2.32	00	17.24	11.87	00	117.11	00	4.20	00	13.93
/07/2004	14:34:49	08	37	154	00	0.29	00	2.20	881	00	2.33	00	16.93	11.71	00	117.97	00	3.71	00	13.93
/07/2004	14:35:49	08	37	161	00	0.30	00	2.20	860	00	2.30	00	16.79	11.55	00	115.61	00	3.74	00	13.94
/07/2004	14:36:49	08	37	156	00	0.29	00	2.14	887	00	2.30	00	17.57	11.92	00	117.43	00	3.86	00	13.93
eport Average:				156		0.29		2.17	885		2.32		17.26	11.80		117.06		3.86		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 7- Mid Load (36 Gross)

Facility Name: Hu Creek Energy Ventures

Location: Hunlock Power S

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 14:42 to 04/07/2004 14:52, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
1/07/2004	14:42:49	08	36	163	00	0.31	00	2.34	857	00	2.32	00	17.52	11.43	00	121.60	00	4.12	00	13.93
1/07/2004	14:43:49	08	36	165	00	0.31	00	2.36	860	00	2.32	00	16.96	11.47	00	118.82	00	3.51	00	13.93
1/07/2004	14:44:49	08	36	168	00	0.32	00	2.34	863	00	2.31	00	16.89	11.54	00	117.75	00	4.52	00	13.93
1/07/2004	14:45:49	08	36	166	00	0.31	00	2.38	861	00	2.31	00	16.91	11.53	00	120.11	00	4.15	00	13.93
/07/2004	14:46:49	08	36	168	00	0.33	00	2.40	836	00	2.31	00	16.45	11.19	00	119.89	00	4.06	00	13.93
/07/2004	14:47:49	08	36	168	00	0.33	00	2.39	831	00	2.30	00	16.69	11.17	00	119.68	00	3.90	00	13.93
/07/2004	14:48:49	08	36	167	00	0.32	00	2.33	843	00	2.30	00	16.51	11.34	00	118.50	00	3.71	00	13.93
/07/2004	14:49:49	08	36	167	00	0.33	00	2.38	830	00	2.29	00	16.68	11.19	00	120.86	00	3.95	00	13.93
/07/2004	14:50:49	08	36	164	00	0.32	00	2.30	837	00	2.30	00	16.38	11.26	00	117.65	00	3.63	00	13.94
/07/2004	14:51:49	08	36	165	00	0.32	00	2.35	834	00	2.30	00	16.68	11.20	00	120.21	00	3.50	00	13.94
/07/2004	14:52:50	08	36	164	00	0.32	00	2.39	836	00	2.30	00	16.81	11.24	00	122.14	00	4.16	00	13.94
eport Average:				166		0.32		2.36	844		2.31		16.77	11.32		119.75		3.93		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

port Printed on: 04/07/2004 15:21:14

Run 8 - Mid Load (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power S n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 14:53 to 04/07/2004 15:03, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	14:53:49	08	36	166	00	0.32	00	2.43	826	00	2.29	00	16.76	11.15	00	122.14	00	3.90	00	13.94
/07/2004	14:54:49	08	36	165	00	0.32	00	2.38	838	00	2.30	00	16.99	11.27	00	122.25	00	5.33	00	13.94
/07/2004	14:55:49	08	36	163	00	0.32	00	2.29	837	00	2.30	00	16.74	11.24	00	119.89	00	3.64	00	13.93
/07/2004	14:56:49	08	36	157	00	0.30	00	2.24	851	00	2.30	00	17.51	11.44	00	122.99	00	3.95	00	13.93
/07/2004	14:57:49	08	36	157	00	0.30	00	2.39	845	00	2.30	00	16.96	11.35	00	122.67	00	5.02	00	13.93
/07/2004	14:58:49	08	36	164	00	0.32	00	2.33	829	00	2.30	00	16.94	11.14	00	121.71	00	3.69	00	13.93
/07/2004	14:59:49	08	36	159	00	0.31	00	2.28	839	00	2.30	00	16.88	11.28	00	120.96	00	4.25	00	13.93
/07/2004	15:00:49	08	36	159	00	0.31	00	2.30	844	00	2.31	00	17.26	11.32	00	122.25	00	3.76	00	13.93
/07/2004	15:01:49	08	36	161	00	0.31	00	2.38	836	00	2.30	00	16.63	11.23	00	121.60	00	3.93	00	13.94
/07/2004	15:02:49	08	36	166	00	0.33	00	2.38	823	00	2.30	00	16.83	11.07	00	121.28	00	3.85	00	13.93
/07/2004	15:03:49	08	36	164	00	0.32	00	2.32	835	00	2.30	00	16.53	11.21	00	119.25	00	3.43	00	13.94
eport Average:				162		0.31		2.34	837		2.30		16.91	11.25		121.54		4.07		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 15:29:11

Run 9 - Mid Load (36 Gross)

Facility Name: Hu Creek Energy Ventures

Location: Hunlock Power S .)

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 15:04 to 04/07/2004 15:14, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	15:04:49	08	36	162	00	0.31	00	2.26	849	00	2.30	00	17.43	11.39	00	121.50	00	4.13	00	13.94
/07/2004	15:05:49	08	36	160	00	0.31	00	2.36	849	00	2.31	00	16.53	11.35	00	119.89	00	4.29	00	13.94
/07/2004	15:06:49	08	36	164	00	0.32	00	2.30	841	00	2.32	00	16.79	11.23	00	119.25	00	3.71	00	13.94
/07/2004	15:07:49	08	36	163	00	0.31	00	2.30	856	00	2.31	00	16.84	11.47	00	118.40	00	3.59	00	13.93
/07/2004	15:08:49	08	36	165	00	0.32	00	2.33	842	00	2.31	00	16.38	11.28	00	118.93	00	3.64	00	13.93
/07/2004	15:09:49	08	36	163	00	0.32	00	2.35	832	00	2.30	00	17.01	11.18	00	122.35	00	3.66	00	13.93
/07/2004	15:10:49	08	36	163	00	0.32	00	2.30	835	00	2.30	00	16.68	11.21	00	119.89	00	3.84	00	13.93
/07/2004	15:11:49	08	36	163	00	0.32	00	2.42	837	00	2.30	00	16.76	11.27	00	121.50	00	4.38	00	13.94
/07/2004	15:12:49	08	36	165	00	0.32	00	2.34	834	00	2.29	00	17.08	11.25	00	122.67	00	4.06	00	13.94
/07/2004	15:13:49	08	36	159	00	0.31	00	2.30	845	00	2.30	00	17.13	11.36	00	122.57	00	3.72	00	13.94
/07/2004	15:14:49	08	36	161	00	0.32	00	2.33	827	00	2.30	00	16.21	11.11	00	119.79	00	3.95	00	13.95
eport Average:				163		0.32		2.33	841		2.30		16.80	11.28		120.61		3.91		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

ort Printed on: 04/07/2004 15:34:13

Run 10 - Mid Load (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power S) Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 15:20 to 04/07/2004 15:30, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
1/07/2004	15:20:50	08	36	168	00	0.33	00	2.35	820	00	2.28	00	16.53	11.10	00	119.89	00	4.74	00	13.94
1/07/2004	15:21:49	08	36	163	00	0.32	00	2.33	830	00	2.28	00	16.93	11.25	00	122.99	00	4.25	00	13.94
1/07/2004	15:22:49	08	36	159	00	0.31	00	2.33	834	00	2.28	00	16.94	11.30	00	122.57	00	3.76	00	13.95
1/07/2004	15:23:50	08	36	163	00	0.32	00	2.29	824	00	2.27	00	16.48	11.22	00	119.68	00	3.74	00	13.95
1/07/2004	15:24:49	08	36	163	00	0.32	00	2.38	814	00	2.27	00	16.28	11.10	00	120.96	00	4.12	00	13.95
1/07/2004	15:25:49	08	36	167	00	0.33	00	2.41	808	00	2.26	00	16.43	11.03	00	121.71	00	3.68	00	13.95
/07/2004	15:26:50	08	36	164	00	0.32	00	2.34	830	00	2.28	00	16.99	11.26	00	121.71	00	4.26	00	13.95
/07/2004	15:27:49	08	36	160	00	0.31	00	2.36	828	00	2.27	00	16.51	11.26	00	122.35	00	4.88	00	13.95
/07/2004	15:28:50	08	36	162	00	0.32	00	2.39	813	00	2.26	00	16.21	11.13	00	121.82	00	5.96	00	13.94
/07/2004	15:29:49	08	36	166	00	0.34	00	2.42	789	00	2.25	00	16.23	10.82	00	123.10	00	3.96	00	13.94
/07/2004	15:30:49	08	36	165	00	0.33	00	2.34	799	00	2.26	00	16.18	10.92	00	120.64	00	3.54	00	13.94
eport Average:				164		0.32		2.36	817		2.27		16.52	11.13		121.58		4.26		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 15:48:23

Run 11 - Mid Load (36 Gross)

Facility Name: Hur Creek Energy Ventures Location: Hunlock Power S. Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 15:31 to 04/07/2004 15:41, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	15:31:50	08	36	162	00	0.32	00	2.33	819	00	2.27	00	16.83	11.14	00	122.67	00	4.11	00	13.94
/07/2004	15:32:49	08	36	159	00	0.31	00	2.24	821	00	2.27	00	16.40	11.16	00	120.86	00	4.28	00	13.94
/07/2004	15:33:50	08	36	157	00	0.31	00	2.38	819	00	2.27	00	16.89	11.13	00	123.96	00	3.89	00	13.94
/07/2004	15:34:50	08	36	162	00	0.32	00	2.30	816	00	2.28	00	16.43	11.06	00	120.86	00	3.99	00	13.95
/07/2004	15:35:49	08	36	161	00	0.32	00	2.23	821	00	2.28	00	16.69	11.12	00	120.96	00	4.31	00	13.95
/07/2004	15:36:49	08	36	157	00	0.31	00	2.33	825	00	2.28	00	16.41	11.17	00	121.28	00	4.92	00	13.95
/07/2004	15:37:49	08	36	162	00	0.32	00	2.33	827	00	2.28	00	16.68	11.22	00	120.64	00	4.62	00	13.95
/07/2004	15:38:50	08	36	161	00	0.31	00	2.24	835	00	2.29	00	16.76	11.25	00	119.89	00	5.38	00	13.95
/07/2004	15:39:50	08	36	157	00	0.30	00	2.32	851	00	2.31	00	17.06	11.41	00	121.82	00	4.82	00	13.95
/07/2004	15:40:50	08	36	160	00	0.31	00	2.38	834	00	2.31	00	16.96	11.16	00	123.10	00	4.68	00	13.94
/07/2004	15:41:50	08	36	161	00	0.32	00	2.35	834	00	2.31	00	17.31	11.14	00	124.06	00	4.56	00	13.94
eport Average:				160		0.31		2.31	827		2.29		16.77	11.18		121.83		4.51		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

ort Printed on: 04/07/2004 15:51:23

Run 12 - Mid l d (36 Gross)

Facility Name: Hu Creek Energy Ventures Location: Hunlock Power S

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 15:42 to 04/07/2004 15:52, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	15:42:50	08	36	157	00	0.30	00	2.24	849	00	2.32	00	17.11	11.29	00	121.50	00	4.20	00	13.94
/07/2004	15:43:50	08	36	157	00	0.30	00	2.22	845	00	2.31	00	16.88	11.29	00	119.36	00	3.95	00	13.94
/07/2004	15:44:50	08	36	158	00	0.31	00	2.29	832	00	2.33	00	16.45	11.05	00	120.21	00	4.07	00	13.94
/07/2004	15:45:50	08	36	162	00	0.32	00	2.38	825	00	2.32	00	16.58	11.01	00	122.14	00	3.78	00	13.95
/07/2004	15:46:50	08	36	161	00	0.32	00	2.30	831	00	2.32	00	16.98	11.06	00	121.60	00	3.77	00	13.95
/07/2004	15:47:50	08	36	164	00	0.32	00	2.39	846	00	2.33	00	17.13	11.23	00	121.50	00	4.07	00	13.95
/07/2004	15:48:50	08	36	165	00	0.32	00	2.32	845	00	2.33	00	16.69	11.22	00	119.68	00	4.16	00	13.95
/07/2004	15:49:50	08	36	161	00	0.32	00	2.26	841	00	2.33	00	16.98	11.15	00	120.64	00	4.68	00	13.95
/07/2004	15:50:50	08	36	159	00	0.31	00	2.35	833	00	2.33	00	16.56	11.04	00	121.18	00	4.19	00	13.95
/07/2004	15:51:50	08	36	165	00	0.33	00	2.39	831	00	2.34	00	16.81	11.00	00	120.43	00	4.70	00	13.96
/07/2004	15:52:50	08	36	166	00	0.32	00	2.34	848	00	2.35	00	16.88	11.18	00	118.82	00	4.08	00	13.96
eport Average:				161		0.32		2.32	839		2.33		16.82	11.14		120.64		4.15		

- Process Codes:
Changing Fuels
Control Equipment Malfunction
Startup
Shutdown
Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

ort Printed on: 04/07/2004 15:58:07

Low Load

Run 1 - Low l d (26 Gross)

Facility Name: Hu Creek Energy Ventures

Location: Hunlock Power St on

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 16:14 to 04/07/2004 16:24, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	16:14:50	08	26	166	00	0.36	00	1.90	743	00	2.29	00	12.06	10.03	00	97.65	00	2.43	00	13.96
4/07/2004	16:15:50	08	26	157	00	0.33	00	1.80	769	00	2.27	00	12.68	10.45	00	98.82	00	3.42	00	13.95
07/2004	16:16:50	08	26	156	00	0.34	00	1.85	742	00	2.28	00	11.95	10.08	00	98.18	00	3.36	00	13.96
07/2004	16:17:50	08	26	160	00	0.35	00	1.92	730	00	2.26	00	11.73	9.98	00	98.18	00	2.32	00	13.96
07/2004	16:18:50	08	26	165	00	0.36	00	1.93	734	00	2.28	00	12.03	9.95	00	98.40	00	2.43	00	13.96
07/2004	16:19:50	08	26	166	00	0.37	00	1.92	738	00	2.29	00	12.11	9.96	00	98.29	00	2.04	00	13.96
07/2004	16:20:50	08	26	162	00	0.35	00	1.85	744	00	2.30	00	12.08	10.00	00	97.97	00	2.89	00	13.96
07/2004	16:21:50	08	26	159	00	0.34	00	1.86	756	00	2.30	00	12.66	10.18	00	99.68	00	2.20	00	13.96
07/2004	16:22:50	08	27	159	00	0.33	00	1.84	772	00	2.30	00	12.68	10.39	00	97.65	00	2.19	00	13.95
07/2004	16:23:50	08	26	158	00	0.33	00	1.89	780	00	2.30	00	13.04	10.49	00	100.53	00	2.16	00	13.95
07/2004	16:24:50	08	26	154	00	0.31	00	1.73	801	00	2.30	00	12.94	10.78	00	96.58	00	2.89	00	13.94
eport Average:				160		0.34		1.86	755		2.29		12.36	10.21		98.36		2.58		

- Process Codes:
  - Changing Fuels
  - Control Equipment Malfunction
  - Startup
  - Shutdown
  - Process Down
  - 06 - Clean Process Equip
  - 07 - Clean Control Equip
  - 08 - Normal Operation
  - 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Report Printed on: 04/07/2004 16:36:46

Run 2 - Low l d (26 Gross)

Facility Name: Hu . Creek Energy Ventures Location: Hunlock Power Station Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 16:25 to 04/07/2004 16:35, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	16:25:50	08	26	151	00	0.30	00	1.73	810	00	2.30	00	12.94	10.88	00	97.22	00	2.47	00	13.95
/07/2004	16:26:50	08	26	156	00	0.32	00	1.82	793	00	2.31	00	12.81	10.60	00	96.90	00	2.21	00	13.95
/07/2004	16:27:50	08	26	160	00	0.34	00	1.90	781	00	2.31	00	12.58	10.44	00	98.29	00	2.25	00	13.95
/07/2004	16:28:50	08	26	160	00	0.34	00	1.89	763	00	2.31	00	12.25	10.23	00	98.18	00	3.04	00	13.95
/07/2004	16:29:50	08	26	164	00	0.36	00	1.92	750	00	2.31	00	12.08	10.02	00	97.75	00	2.37	00	13.95
/07/2004	16:30:50	08	26	162	00	0.35	00	1.89	755	00	2.30	00	12.66	10.13	00	100.21	00	2.48	00	13.96
/07/2004	16:31:50	08	26	160	00	0.35	00	1.92	747	00	2.32	00	12.41	9.97	00	100.00	00	2.00	00	13.96
/07/2004	16:32:50	08	26	161	00	0.35	00	1.88	754	00	2.31	00	12.41	10.09	00	98.18	00	2.49	00	13.96
/07/2004	16:33:50	08	26	157	00	0.33	00	1.85	771	00	2.31	00	12.61	10.31	00	98.72	00	2.89	00	13.96
/07/2004	16:34:50	08	26	160	00	0.34	00	1.85	773	00	2.32	00	12.93	10.28	00	98.40	00	2.11	00	13.96
/07/2004	16:35:50	08	26	159	00	0.33	00	1.84	791	00	2.34	00	13.18	10.44	00	98.29	00	2.39	00	13.96
eport Average:				159		0.34		1.86	772		2.31		12.62	10.31		98.38		2.43		

- Process Codes:

- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 16:40:47

Run 3 - Low ! d (26 Gross)

Facility Name: Hu..ck Creek Energy Ventures

Location: Hunlock Power Station

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 16:36 to 04/07/2004 16:46, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	16:36:48	08	26	154	00	0.31	00	1.80	814	00	2.35	00	13.24	10.73	00	98.40	00	2.73	00	13.95
/07/2004	16:37:50	08	26	153	00	0.31	00	1.73	812	00	2.35	00	12.84	10.67	00	95.72	00	2.38	00	13.95
[illegible]2004	16:38:50	08	26	154	00	0.32	00	1.78	807	00	2.36	00	13.13	10.59	00	97.54	00	2.72	00	13.95
[illegible]2004	16:39:48	08	26	157	00	0.33	00	1.82	802	00	2.37	00	12.86	10.48	00	97.86	00	2.42	00	13.95
[illegible]2004	16:40:50	08	26	157	00	0.33	00	1.83	788	00	2.36	00	12.56	10.32	00	97.22	00	2.87	00	13.96
[illegible]2004	16:41:50	08	26	161	00	0.34	00	1.89	779	00	2.36	00	12.66	10.19	00	97.97	00	2.48	00	13.96
[illegible]2004	16:42:50	08	26	163	00	0.35	00	1.85	779	00	2.37	00	12.13	10.18	00	95.40	00	2.20	00	13.96
[illegible]/2004	16:43:50	08	26	163	00	0.36	00	1.85	766	00	2.37	00	12.84	9.99	00	98.29	00	2.65	00	13.96
[illegible]/2004	16:44:50	08	26	156	00	0.33	00	1.74	794	00	2.35	00	12.93	10.43	00	96.04	00	2.54	00	13.95
[illegible]/2004	16:45:50	08	26	152	00	0.32	00	1.80	800	00	2.37	00	13.19	10.44	00	99.57	00	2.78	00	13.96
[illegible]/2004	16:46:50	08	26	152	00	0.32	00	1.80	805	00	2.38	00	12.96	10.46	00	98.29	00	2.43	00	13.95
[illegible]port Average:				157		0.33		1.81	795		2.36		12.85	10.41		97.48		2.56		

[illegible] Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip
- 07 - Clean Control Equip
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Run 4 - Low Load (26 Gross)

Facility Name: H[illegible] Creek Energy Ventures

Location: Hunlock Power [illegible]on

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 16:53 to 04/07/2004 17:03, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	16:53:48	08	26	156	00	0.33	00	1.82	794	00	2.40	00	12.98	10.24	00	98.29	00	2.51	00	13.96
4/07/2004	16:54:48	08	26	157	00	0.34	00	1.83	797	00	2.41	00	13.16	10.21	00	98.72	00	2.48	00	13.96
4/07/2004	16:55:48	08	26	160	00	0.35	00	1.89	790	00	2.42	00	13.18	10.08	00	99.68	00	2.98	00	13.96
4/07/2004	16:56:50	08	26	159	00	0.34	00	1.82	798	00	2.41	00	12.89	10.22	00	95.72	00	2.62	00	13.96
4/07/2004	16:57:50	08	25	155	00	0.32	00	1.73	822	00	2.40	00	12.79	10.57	00	93.80	00	3.72	00	13.96
4/07/2004	16:58:48	08	26	150	00	0.31	00	1.65	837	00	2.42	00	12.83	10.70	00	93.26	00	2.69	00	13.96
/07/2004	16:59:50	08	26	151	00	0.31	00	1.64	826	00	2.44	00	12.66	10.49	00	92.83	00	2.22	00	13.96
/07/2004	17:00:48	08	26	150	00	0.31	00	1.67	819	00	2.43	00	13.04	10.43	00	93.69	00	2.50	00	13.96
/07/2004	17:01:48	08	26	149	00	0.30	00	1.64	855	00	2.43	00	13.44	10.87	00	93.37	00	2.10	00	13.96
/07/2004	17:02:48	08	26	147	00	0.29	00	1.60	869	00	2.45	00	13.34	10.96	00	92.30	00	2.18	00	13.96
/07/2004	17:03:48	08	26	148	00	0.29	00	1.68	872	00	2.46	00	13.37	10.97	00	94.01	00	2.18	00	13.97
eport Average:				153		0.32		1.72	825		2.42		13.06	10.52		95.06		2.56		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip.
07 - Clean Control Equip
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

ort Printed on: 04/07/2004 17:10:41

Run 5- Low l d (26 Gross)

Facility Name: H k Creek Energy Ventures

Location: Hunlock Power S on

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 17:04 to 04/07/2004 17:14, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
Date	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	17:04:48	08	26	152	00	0.30	00	1.67	863	00	2.45	00	13.79	10.89	00	95.40	00	2.57	00	13.97
4/07/2004	17:05:48	08	26	147	00	0.29	00	1.59	869	00	2.45	00	13.52	10.98	00	92.41	00	2.73	00	13.96
4/07/2004	17:06:46	08	26	145	00	0.29	00	1.64	871	00	2.46	00	13.74	10.97	00	94.44	00	2.46	00	13.96
4/07/2004	17:07:48	08	26	148	00	0.30	00	1.67	860	00	2.46	00	13.14	10.81	00	92.73	00	2.42	00	13.96
4/07/2004	17:08:48	08	25	149	00	0.30	00	1.64	867	00	2.47	00	13.09	10.86	00	91.87	00	2.55	00	13.96
4/07/2004	17:09:48	08	26	148	00	0.30	00	1.58	872	00	2.48	00	13.56	10.88	00	92.94	00	2.54	00	13.96
4/07/2004	17:10:48	08	26	148	00	0.30	00	1.65	866	00	2.48	00	13.67	10.81	00	94.44	00	2.74	00	13.96
4/07/2004	17:11:48	08	26	148	00	0.30	00	1.66	865	00	2.47	00	13.41	10.82	00	93.37	00	2.46	00	13.96
4/07/2004	17:12:48	08	26	146	00	0.29	00	1.68	870	00	2.46	00	13.92	10.93	00	97.01	00	2.61	00	13.96
4/07/2004	17:13:48	08	26	145	00	0.29	00	1.59	871	00	2.46	00	12.91	10.95	00	91.12	00	2.29	00	13.97
4/07/2004	17:14:48	08	26	149	00	0.30	00	1.64	856	00	2.47	00	13.47	10.73	00	93.26	00	2.48	00	13.97
Report Average:				148		0.30		1.64	866		2.46		13.47	10.88		93.54		2.53		

C - Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip
- 07 - Clean Control Equip
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

Report Printed on 04/07/2004 17:46:25

Run 6- Low l d (26 Gross)

Facility Name: H k Creek Energy Ventures

Location: Hunlock Power S on

Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 17:15 to 04/07/2004 17:25, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
4/07/2004	17:15:48	08	26	152	00	0.30	00	1.71	868	00	2.47	00	13.97	10.88	00	95.29	00	2.19	00	13.97
4/07/2004	17:16:48	08	26	154	00	0.31	00	1.82	867	00	2.49	00	13.08	10.77	00	93.90	00	2.42	00	13.97
4/07/2004	17:17:48	08	26	158	00	0.32	00	1.68	864	00	2.45	00	13.51	10.89	00	92.41	00	2.51	00	13.97
4/07/2004	17:18:48	08	26	156	00	0.31	00	1.67	880	00	2.47	00	13.59	11.02	00	92.62	00	2.27	00	13.97
4/07/2004	17:19:48	08	26	155	00	0.31	00	1.71	870	00	2.48	00	13.71	10.85	00	94.01	00	2.78	00	13.97
4/07/2004	17:20:48	08	26	152	00	0.30	00	1.73	878	00	2.49	00	13.82	10.91	00	95.51	00	2.68	00	13.97
4/07/2004	17:21:48	08	26	157	00	0.32	00	1.83	867	00	2.49	00	13.74	10.79	00	95.08	00	2.81	00	13.97
4/07/2004	17:22:48	08	26	161	00	0.33	00	1.85	874	00	2.50	00	13.67	10.79	00	95.19	00	2.49	00	13.97
4/07/2004	17:23:48	08	26	157	00	0.31	00	1.66	879	00	2.48	00	13.37	10.97	00	92.19	00	2.41	00	13.97
4/07/2004	17:24:48	08	26	156	00	0.32	00	1.77	867	00	2.50	00	14.17	10.73	00	97.54	00	2.74	00	13.97
4/07/2004	17:25:48	08	26	158	00	0.33	00	1.82	853	00	2.51	00	13.41	10.51	00	94.22	00	2.74	00	13.98
eport Average:				156		0.31		1.75	870		2.48		13.64	10.83		94.36		2.55		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- Clean Process Equip.
- Clean Control Equip.
- Normal Operation
- Other

MC - Monitoring Codes:
- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 17:51:29

Run 7- Low ' ıd (26 Gross)

Facility Name: H. k Creek Energy Ventures Location: Hunlock Power ..on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 17:31 to 04/07/2004 17:41, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Stack Press.
/07/2004	17:31:48	08	26	161	00	0.32	00	1.78	882	00	2.50	00	13.71	10.89	00	94.12	00	2.65	00	13.97
/07/2004	17:32:48	08	26	163	00	0.33	00	1.82	875	00	2.52	00	13.57	10.75	00	93.90	00	2.46	00	13.97
[illegible]/2004	17:33:48	08	26	164	00	0.33	00	1.86	870	00	2.51	00	14.24	10.73	00	96.79	00	2.57	00	13.97
[illegible]/2004	17:34:48	08	26	166	00	0.33	00	1.90	886	00	2.51	00	14.25	10.91	00	95.83	00	2.65	00	13.97
[illegible]/2004	17:35:48	08	26	162	00	0.32	00	1.84	896	00	2.52	00	14.01	10.98	00	95.61	00	2.54	00	13.96
[illegible]/2004	17:36:48	08	26	164	00	0.33	00	1.89	874	00	2.52	00	13.86	10.72	00	96.47	00	2.79	00	13.96
[illegible]/2004	17:37:48	08	26	166	00	0.34	00	1.90	861	00	2.50	00	13.89	10.64	00	96.36	00	3.39	00	13.96
[illegible]/2004	17:38:48	08	26	161	00	0.33	00	1.86	874	00	2.50	00	13.99	10.80	00	97.01	00	2.72	00	13.96
[illegible]/2004	17:39:48	08	26	163	00	0.33	00	1.84	867	00	2.50	00	13.57	10.70	00	96.68	00	2.80	00	13.96
[illegible]/2004	17:40:48	08	26	171	00	0.36	00	1.96	842	00	2.50	00	14.11	10.42	00	97.97	00	2.68	00	13.97
[illegible]/2004	17:41:48	08	26	170	00	0.35	00	1.93	869	00	2.51	00	13.94	10.71	00	95.72	00	2.83	00	13.96
eport Average:				165		0.33		1.87	872		2.51		13.92	10.75		96.04		2.73		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip
- 07 - Clean Control Equip
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

ort Printed on 04/07/2004 17:59:02

Run 8- Low L l (26 Gross)

acility Name: Hun.. .. Creek Energy Ventures Location: Hunlock Power Station Source: Boiler No. 6; CEMS ID 03176

eport Period: 04/07/2004 17:42 to 04/07/2004 17:52, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
te	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
07/2004	17:42:48	08	26	173	00	0.36	00	1.98	865	00	2.52	00	13.36	10.62	00	94.12	00	2.82	00	13.97
07/2004	17:43:48	08	26	174	00	0.35	00	2.03	864	00	2.48	00	14.14	10.77	00	98.40	00	2.62	00	13.97
07/2004	17:44:48	08	26	173	00	0.35	00	1.98	867	00	2.51	00	13.87	10.66	00	97.75	00	2.87	00	13.97
07/2004	17:45:49	08	26	169	00	0.35	00	1.85	851	00	2.50	00	13.26	10.53	00	93.58	00	4.12	00	13.97
07/2004	17:46:48	08	26	167	00	0.34	00	1.85	860	00	2.49	00	13.97	10.67	00	95.29	00	3.33	00	13.96
07/2004	17:47:48	08	26	162	00	0.32	00	1.84	888	00	2.51	00	14.15	10.93	00	95.94	00	2.90	00	13.97
07/2004	17:48:48	08	26	159	00	0.32	00	1.77	891	00	2.51	00	13.71	10.98	00	93.69	00	2.58	00	13.97
07/2004	17:49:48	08	26	156	00	0.31	00	1.67	888	00	2.49	00	14.17	11.02	00	94.44	00	3.05	00	13.97
07/2004	17:50:48	08	26	150	00	0.29	00	1.64	900	00	2.50	00	14.49	11.12	00	94.76	00	2.83	00	13.97
07/2004	17:51:48	08	26	143	00	0.27	00	1.68	924	00	2.52	00	14.50	11.32	00	97.01	00	2.95	00	13.97
07/2004	17:52:49	08	26	149	00	0.30	00	1.71	890	00	2.52	00	13.81	10.93	00	94.44	00	2.96	00	13.98
eport Average:				161		0.32		1.82	881		2.50		13.95	10.87		95.40		3.00		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 9- Low L l (26 Gross)

acility Name: Hun . Creek Energy Ventures Location: Hunlock Power Sta..on Source: Boiler No. 6; CEMS ID 03176

eport Period: 04/07/2004 17:53 to 04/07/2004 18:03, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
te	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
07/2004	17:53:48	08	26	151	00	0.30	00	1.70	895	00	2.50	00	14.14	11.06	00	95.19	00	3.75	00	13.98
07/2004	17:54:48	08	26	154	00	0.31	00	1.71	883	00	2.53	00	13.49	10.81	00	92.41	00	2.88	00	13.98
07/2004	17:55:48	08	26	152	00	0.30	00	1.67	888	00	2.47	00	14.34	11.11	00	95.51	00	2.70	00	13.97
07/2004	17:56:48	08	26	147	00	0.29	00	1.66	897	00	2.50	00	13.89	11.07	00	94.55	00	2.99	00	13.96
07/2004	17:57:48	08	26	151	00	0.30	00	1.70	877	00	2.49	00	13.66	10.87	00	94.01	00	3.10	00	13.97
07/2004	17:58:49	08	26	152	00	0.30	00	1.68	874	00	2.48	00	13.72	10.88	00	94.01	00	2.85	00	13.97
07/2004	17:59:48	08	26	149	00	0.30	00	1.66	879	00	2.49	00	13.59	10.92	00	93.26	00	2.96	00	13.97
07/2004	18:00:49	08	26	149	00	0.29	00	1.68	889	00	2.50	00	14.49	11.01	00	96.47	00	2.72	00	13.96
07/2004	18:01:48	08	26	147	00	0.29	00	1.67	902	00	2.51	00	13.66	11.09	00	93.37	00	2.96	00	13.97
07/2004	18:02:48	08	26	151	00	0.30	00	1.61	884	00	2.50	00	13.76	10.94	00	92.83	00	2.53	00	13.97
07/2004	18:03:49	08	26	148	00	0.30	00	1.59	881	00	2.51	00	13.51	10.84	00	92.09	00	2.49	00	13.97
port Average:				150		0.30		1.67	886		2.50		13.84	10.96		93.97		2.90		

- Process Codes:
- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down

06 - Clean Process Equip
07 - Clean Control Equip
08 - Normal Operation
09 - Other

MC - Monitoring Codes:

00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 10- Low L ^ad (26 Gross)

Facility Name: Hu . Creek Energy Ventures Location: Hunlock Power S .n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 18:08 to 04/07/2004 18:18, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
4/07/2004	18:08:49	08	26	150	00	0.30	00	1.73	873	00	2.51	00	13.23	10.75	00	93.80	00	2.82	00	13.97
4/07/2004	18:09:49	08	26	153	00	0.31	00	1.63	867	00	2.46	00	13.79	10.89	00	93.69	00	3.23	00	13.97
4/07/2004	18:10:49	08	26	147	00	0.29	00	1.57	883	00	2.49	00	13.82	10.99	00	92.94	00	2.50	00	13.97
4/07/2004	18:11:49	08	26	144	00	0.28	00	1.64	890	00	2.49	00	13.82	11.04	00	93.80	00	3.13	00	13.97
4/07/2004	18:12:49	08	26	144	00	0.28	00	1.58	903	00	2.48	00	13.76	11.24	00	91.76	00	2.88	00	13.98
4/07/2004	18:13:49	08	26	145	00	0.28	00	1.57	910	00	2.49	00	14.47	11.29	00	94.44	00	2.78	00	13.98
4/07/2004	18:14:49	08	26	144	00	0.28	00	1.63	903	00	2.51	00	13.81	11.10	00	93.16	00	2.76	00	13.98
4/07/2004	18:15:49	08	26	146	00	0.29	00	1.61	894	00	2.48	00	13.51	11.13	00	91.76	00	2.79	00	13.97
4/07/2004	18:16:49	08	26	148	00	0.29	00	1.66	888	00	2.48	00	14.09	11.09	00	95.61	00	3.01	00	13.97
4/07/2004	18:17:49	08	27	147	00	0.29	00	1.63	888	00	2.49	00	13.56	11.05	00	93.05	00	2.93	00	13.97
4/07/2004	18:18:49	08	26	153	00	0.31	00	1.73	857	00	2.47	00	13.34	10.71	00	94.12	00	2.52	00	13.97
Report Average:				147		0.29		1.63	887		2.49		13.75	11.03		93.47		2.85		

C - Process Codes:

- Changing Fuels
- Control Equipment Malfunction
- Startup
- Shutdown
- Process Down
- 06 - Clean Process Equip.
- 07 - Clean Control Equip.
- 08 - Normal Operation
- 09 - Other

MC - Monitoring Codes:

- 00 - System OK
- 10 - Required Adjustment Not Made
- 11 - Excess Drift Primary Analyzer
- 12 - Excess Drift Ancillary Analyzer
- 13 - Process Down
- 14 - Recalibration
- 15 - Preventative Maintenance
- 16 - Primary Analyzer Malfunction
- 17 - Ancillary Analyzer Malfunction
- 18 - Data Handling System Malfunction
- 19 - Sample Interface Malfunction
- 20 - Corrective Maintenance
- 21 - Blowback
- 98 - Automatic Calibration
- 99 - Software Adjust

port Printed on: 04/07/2004 18:25:12

Run 11- Low ' 'd (26 Gross)

acility Name: Hu. .x Creek Energy Ventures Location: Hunlock Power Sta..on Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 18:19 to 04/07/2004 18:29, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ite	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
/07/2004	18:19:49	08	26	150	00	0.30	00	1.64	874	00	2.46	00	13.91	11.00	00	93.90	00	3.28	00	13.97
/07/2004	18:20:49	08	26	144	00	0.28	00	1.63	902	00	2.48	00	14.12	11.24	00	95.29	00	2.82	00	13.97
07/2004	18:21:49	08	26	146	00	0.29	00	1.66	878	00	2.48	00	13.86	10.96	00	95.29	00	3.28	00	13.98
07/2004	18:22:49	08	26	147	00	0.29	00	1.63	886	00	2.48	00	13.64	11.03	00	92.94	00	2.73	00	13.97
07/2004	18:23:49	08	27	148	00	0.29	00	1.63	890	00	2.49	00	13.71	11.05	00	92.41	00	3.01	00	13.98
07/2004	18:24:49	08	26	149	00	0.29	00	1.64	890	00	2.48	00	13.54	11.11	00	92.09	00	2.90	00	13.98
/07/2004	18:25:49	08	26	149	00	0.29	00	1.53	898	00	2.47	00	13.34	11.25	00	88.34	00	2.70	00	13.98
/07/2004	18:26:49	08	26	146	00	0.28	00	1.54	905	00	2.48	00	14.02	11.29	00	92.62	00	2.90	00	13.97
/07/2004	18:27:49	08	26	139	00	0.27	00	1.60	905	00	2.49	00	14.20	11.23	00	95.51	00	4.05	00	13.97
/07/2004	18:28:49	08	26	140	00	0.28	00	1.57	883	00	2.48	00	13.06	11.00	00	90.91	00	3.57	00	13.97
/07/2004	18:29:49	08	26	144	00	0.29	00	1.63	876	00	2.48	00	13.39	10.92	00	93.16	00	3.36	00	13.98
eport Average:				146		0.29		1.61	890		2.48		13.71	11.10		92.95		3.15		

C - Process Codes:
1 - Changing Fuels
2 - Control Equipment Malfunction
3 - Startup
4 - Shutdown
5 - Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

Run 12- Low L ad (26 Gross)

Facility Name: Hu . Creek Energy Ventures Location: Hunlock Power S n Source: Boiler No. 6; CEMS ID 03176

Report Period: 04/07/2004 18:30 to 04/07/2004 18:40, Report Averages: 1-Minute Averages, Number of Avgs: 11

				NOx					SO2					CO2		Stack Flow		Opacity		Stack
ate	Time	PC	MW	ppm	MC	lb/mbtu	MC	lb/min	ppm	MC	lb/mbtu	MC	lb/min	%	MC	kwscfm	MC	%	MC	Press.
/07/2004	18:30:49	08	27	148	00	0.30	00	1.61	873	00	2.48	00	13.77	10.89	00	93.58	00	2.86	00	13.98
/07/2004	18:31:49	08	27	146	00	0.29	00	1.60	883	00	2.48	00	14.04	11.02	00	94.76	00	3.33	00	13.97
/07/2004	18:32:49	08	26	144	00	0.28	00	1.64	895	00	2.48	00	13.97	11.15	00	94.01	00	3.27	00	13.98
/07/2004	18:33:49	08	26	142	00	0.27	00	1.58	904	00	2.49	00	13.96	11.24	00	93.26	00	3.97	00	13.98
/07/2004	18:34:49	08	26	138	00	0.26	00	1.47	916	00	2.49	00	14.15	11.38	00	93.37	00	3.32	00	13.98
/07/2004	18:35:49	08	26	142	00	0.29	00	1.58	883	00	2.53	00	13.76	10.81	00	92.94	00	2.92	00	13.98
/07/2004	18:36:49	08	26	143	00	0.28	00	1.64	893	00	2.49	00	13.82	11.09	00	94.44	00	3.20	00	13.97
'07/2004	18:37:49	08	26	146	00	0.29	00	1.71	887	00	2.49	00	14.09	11.00	00	96.58	00	3.24	00	13.98
'07/2004	18:38:49	08	26	151	00	0.30	00	1.72	882	00	2.48	00	14.24	11.00	00	97.86	00	3.01	00	13.98
'07/2004	18:39:49	08	26	148	00	0.29	00	1.59	883	00	2.48	00	13.92	11.03	00	93.80	00	3.39	00	13.98
'07/2004	18:40:49	08	26	143	00	0.28	00	1.64	886	00	2.48	00	13.72	11.07	00	94.55	00	3.58	00	13.97
eport Average:				145		0.28		1.62	890		2.49		13.95	11.06		94.47		3.28		

- Process Codes:
Changing Fuels
Control Equipment Malfunction
Startup
Shutdown
Process Down
06 - Clean Process Equip.
07 - Clean Control Equip.
08 - Normal Operation
09 - Other

MC - Monitoring Codes:
00 - System OK
10 - Required Adjustment Not Made
11 - Excess Drift Primary Analyzer
12 - Excess Drift Ancillary Analyzer
13 - Process Down
14 - Recalibration
15 - Preventative Maintenance
16 - Primary Analyzer Malfunction
17 - Ancillary Analyzer Malfunction
18 - Data Handling System Malfunction
19 - Sample Interface Malfunction
20 - Corrective Maintenance
21 - Blowback
98 - Automatic Calibration
99 - Software Adjust

ort Printed on: 04/07/2004 18:46:35

APPENDIX 4
REFERENCE METHOD QUALITY ASSURANCE

Calibration Gas Specification Sheets

PA

BOC GASES

Assay Laboratory
BOC GASES
600 Union Landing Road
Riverton,NJ 08077
(856) 829 7878

CERTIFICATE OF ANALYSIS
EPA Protocol Gas

CUSTOMER
Reading Gas&Gear
732 Tulpehocken Street
READING, PA 19601

CUSTOMER PO NO:

Previous Certification Date(s):

CYLINDER NO	:	CC19922
EXPIRATION DATE	:	17-Feb-2007
CERTIFICATION DATE	:	19-Feb-2004
CYLINDER PRESSURE	:	2000 psig
PRODUCT ID NO	:	24014833
LOT NUMBER	:	598146

ANALYTICAL INFORMATION

This calibration standard has been certified per the 1997 EPA Traceability Protocol, Document EPA-600/97/121, Using Procedure G1. All Values certified to be +/-1% NIST Traceable.

Do Not Use This Cylinder below 150 psig. i.e. 1.0 Megapascal

Analytical Results

Components	Requested Mixture	Certified Concentration	Analytical Uncertainty	Assay Dates
CARBON DIOXIDE	10.00 %	10.05 %	+/-1.00% NIST Traceable	02/18/04
OXYGEN	12.50 %	12.44 %	+/-1.00% NIST Traceable	02/18/04
OGEN	BALANCE GAS			

CALIBRATION STANDARDS USED IN ASSAY

Type	LOT ID	Cylinder No	Concentration	Expiration
NTRM 81674	00060411	XC018734B	6.89 +/- 0.04 % CO2/N2	02/01/08
NTRM 82658	01119411	CC14306	9.72 +/- 0.11 % O2/N2	07/01/06

ANALYTICAL INSTRUMENTS USED IN ASSAY

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Siemens 5E DD721	NonDispersive Infrared	01/30/04
Siemens 5E BN805	Paramagnetic	02/11/04

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A Delaware Corporation

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QA Approved

PA

BOC GASES

Assay Laboratory
BOC GASES
600 Union Landing Road
Riverton,NJ 08077
(856) 829 7878

CERTIFICATE OF ANALYSIS
EPA Protocol Gas

CUSTOMER
Reading Gas&Gear
732 Tulpehocken Street
READING, PA 19601

CUSTOMER PO NO:

Previous Certification Date(s):

CYLINDER NO	:	CC120417
EXPIRATION DATE	:	17-Feb-2007
CERTIFICATION DATE	:	19-Feb-2004
CYLINDER PRESSURE	:	2000 psig
PRODUCT ID NO	:	24005985
LOT NUMBER	:	598145

ANALYTICAL INFORMATION

This calibration standard has been certified per the 1997 EPA Traceability Protocol, Document EPA-600/97/121, Using Procedure G1. All Values certified to be +/-1% NIST Traceable.

Do Not Use This Cylinder below 150 psig. i.e. 1.0 Megapascal

Analytical Results

Components	Requested Mixture	Certified Concentration	Analytical Uncertainty	Assay Dates
CARBON DIOXIDE	18.00 %	17.90 %	+/-1.00% NIST Traceable	02/18/04
OXYGEN	22.50 %	22.4 %	+/-1.00% NIST Traceable	02/18/04
ɔGEN	BALANCE GAS			

CALIBRATION STANDARDS USED IN ASSAY

Type	LOT ID	Cylinder No	Concentration	Expiration
SRM 2745	9-B-32	CAL010373	15.69 +/- 0.06 % CARBON DIOXIDE	04/03/07
NTRM 82659X	03060219	XC024390B	22.60 +/- 0.10 % O2/N2	05/01/07

ANALYTICAL INSTRUMENTS USED IN ASSAY

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Siemens 5E DD721	NonDispersive Infrared	01/30/04
Siemens 5E BN805	Paramagnetic	02/11/04

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BOC GASES PA

Assay Laboratory
BOC GASES
600 Union Landing Road
Riverton,NJ 08077
(609) 829 7878

CERTIFICATE OF ANALYSIS
EPA Protocol Gas

CUSTOMER
Reading Compressed Plant
732 TULPEHOCKEN STREET
READING, PA 196010000

CUSTOMER PO NO:

Previous Certification Date(s):

CYLINDER NO	:	CC12684
EXPIRATION DATE	:	18-Nov-2004
CERTIFICATION DATE	:	02-Dec-2002
CYLINDER PRESSURE	:	2000 psig
PRODUCT ID NO	:	24007490
LOT NUMBER	:	532640

ANALYTICAL INFORMATION

This calibration standard has been certified per the 1997 EPA Traceability Protocol, Document EPA-600/97/121, Using Procedure G1. All Values certified to be +/-1% NIST Traceable.

Do Not Use This Cylinder below 150 psig. i.e. 1.0 Megapascal

Analytical Results

Components	Requested Mixture	Certified Concentration	Analytical Uncertainty	Assay Dates
NITRIC OXIDE	225.00 ppm	224.5 ppm	+/-1.00% NIST Traceable	11/22/02 & 12/02/02
[illegible]AL OXIDES OF NITROGEN		224.6 ppm		
[illegible]OGEN	BALANCE GAS			

CALIBRATION STANDARDS USED IN ASSAY

Type	LOT ID	Cylinder No	Concentration	Expiration
SRM 1684B	44-R-09	FF17221	97.50 +/- 0.80 ppm NO/N2	10/01/06

ANALYTICAL INSTRUMENTS USED IN ASSAY

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 560 ADU9800406 NO/NO2	FTIR	10/31/02

BOC GASES

Assay Laboratory
BOC GASES
600 Union Landing Road
Riverton,NJ 08077
(856) 829 7878

CERTIFICATE OF ANALYSIS
EPA Protocol Gas

CUSTOMER
Reading Gas&Gear
732 Tulpehocken Street
READING, PA 19601

CUSTOMER PO NO:

Previous Certification Date(s):

CYLINDER NO	:	XC035198B
EXPIRATION DATE	:	29-Sep-2005
CERTIFICATION DATE	:	08-Oct-2003
CYLINDER PRESSURE	:	2000 psig
PRODUCT ID NO	:	24007108
LOT NUMBER	:	577649

ANALYTICAL INFORMATION

This calibration standard has been certified per the 1997 EPA Traceability Protocol, Document EPA-600/97/121, Using Procedure G1. All Values certified to be +/-1% NIST Traceable.

Do Not Use This Cylinder below 150 psig. i.e. 1.0 Megapascal

Analytical Results

Components	Requested Mixture	Certified Concentration	Analytical Uncertainty	Assay Dates
NITRIC OXIDE	450.00 ppm	446.3 ppm	+/-1.00% NIST Traceable	09/26/03 & 10/03/03
SULFUR DIOXIDE	900.00 ppm	888.0 ppm	+/-1.00% NIST Traceable	09/26/03 & 10/03/03
OXIDES OF NITROGEN		446.3 ppm		
NITROGEN	BALANCE GAS			

CALIBRATION STANDARDS USED IN ASSAY

Type	LOT ID	Cylinder No	Concentration	Expiration
NTRM 81686	03060128	XC023960B	487.60 +/- 3.00 ppm NO/N2	05/01/07
NTRM 81662	98060311	XC006015B	997.00 +/- 9.00 ppm SO2/N2	07/01/06

ANALYTICAL INSTRUMENTS USED IN ASSAY

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 560 ADU9800406 NO/NO2	FTIR	09/11/03
Nicolet 560 ADU9800406 SO2	FTIR	09/18/03

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A Delaware Corporation

QA Approved

BOC GASES

Assay Laboratory
BOC GASES
600 Union Landing Road
Riverton,NJ 08077
(609) 829 7878

CERTIFICATE OF ANALYSIS
EPA Protocol Gas

CUSTOMER
Reading Compressed Plant
732 TULPEHOCKEN STREET
READING, PA 196010000

CUSTOMER PO NO:

Previous Certification Date(s):

CYLINDER NO	:	CC10824
EXPIRATION DATE	:	09-Sep-2004
CERTIFICATION DATE	:	18-Sep-2002
CYLINDER PRESSURE	:	2000 psig
PRODUCT ID NO	:	24007156
LOT NUMBER	:	521651

ANALYTICAL INFORMATION

This calibration standard has been certified per the 1997 EPA Traceability Protocol, Document EPA-600/97/121, Using Procedure G1. All Values certifie to be +/-1% NIST Traceable.

Do Not Use This Cylinder below 150 psig. i.e. 1.0 Megapascal

Analytical Results

Components	Requested Mixture	Certified Concentration	Analytical Uncertainty	Assay Dates
NITRIC OXIDE	900.00 ppm	894 ppm	+/-1.00% NIST Traceable	09/10/02 & 09/17/0
FUR DIOXIDE	1800.00 ppm	1785.0 ppm	+/-1.00% NIST Traceable	09/10/02 & 09/17/0
TAL OXIDES OF NITROGEN		894 ppm		
NITROGEN	BALANCE GAS			

CALIBRATION STANDARDS USED IN ASSAY

Type	LOT ID	Cylinder No	Concentration	Expiration
NTRM 81687	96060116	XN000583B	957.00 +/- 11.00 ppm N0/N2	10/02/02
SRM 1663A	92-E-07	CAL011194	1475.40 +/- 7.50 ppm SULFUR DIOXIDE	06/01/06

ANALYTICAL INSTRUMENTS USED IN ASSAY

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 560 ADU9800406	FTIR	08/19/02
Nicolet 560 ADU9800406	FTIR	08/19/02

NOx Converter Test

CATALYST AIR MANAGEMENT, INC.
AIR QUALITY TESTING SERVICES

ANALYZER:	TECO 10A
SERIAL #:	10AR-25990-222
TIME:	9:24
DATE:	4/5/04
TEST:	NOx CONVERTER EFFICIENCY

DATE	TIME	NOx ppm
4/5/04	9:24	222.41
4/5/04	9:25	222.32
4/5/04	9:26	222.87
4/5/04	9:27	223.95
4/5/04	9:28	224.39
4/5/04	9:29	224.08
4/5/04	9:30	223.97
4/5/04	9:31	223.46
4/5/04	9:32	220.71
4/5/04	9:33	221.5
4/5/04	9:34	221.56
4/5/04	9:35	221.81
4/5/04	9:36	222.29
4/5/04	9:37	223.1
4/5/04	9:38	222.21
4/5/04	9:39	221.05
4/5/04	9:40	220.84
4/5/04	9:41	220.21
4/5/04	9:42	220.19
4/5/04	9:43	220.5
4/5/04	9:44	220.75
4/5/04	9:45	220.92
4/5/04	9:46	220.86
4/5/04	9:47	220.14
4/5/04	9:48	220.33
4/5/04	9:49	220.99
4/5/04	9:50	221.13
4/5/04	9:51	220.62
4/5/04	9:52	220.98
4/5/04	9:53	220.61
4/5/04	9:54	220.36
		AVG
		221.65
		ppm

Highest Concentration:	224.39
Ending Concentration:	220.36
Drift:	1.80%

CALIBRATION GASES

NOx:	446.3
O2:	22.40

ANALYZER SCALE : 250 ppm

Flow and Moisture

Catalyst Air Management, Inc.

METER BOX NUMBER: **040**
DATE: 02/06/04
CALIBRATED BY: Ferguson

BENCH METER CALIBRATION FACTOR: 1.000

Orifice Manometer Setting (Δ H) In. H_2O	Standard Test Meter Start: End:	(V_w) ft^3	Dry Gas Meter Start: End:	(V_d) ft^3	Standard Test Meter (T_w) °F	Dry Gas Meter Inlet (T_{di}) °F	Outlet (T_{do}) °F	Average (T_d) °F	Barometric Pressure (P_b) in. of Hg	Time (Time) min.	Y_i	$\Delta H@i$	Q_m	K_m
0.50	194.919	**5.194**	605.656	**5.304**	42.0	42.0	41.0	41.5	29.58	13.12	**0.98**	**1.66**	0.404	0.747
	200.113		610.960											
1.00	200.113	**5.181**	610.960	**5.278**	42.0	43.0	42.0	42.5	29.58	9.23	**0.98**	**1.66**	0.571	0.747
	205.294		616.238											
2.00	205.294	**5.160**	616.238	**5.239**	42.0	46.0	42.0	44.0	29.58	6.42	**0.98**	**1.64**	0.813	0.751
	210.454		621.477											
3.00	210.454	**5.188**	621.477	**5.314**	42.0	50.0	43.0	46.5	29.58	5.32	**0.98**	**1.65**	0.992	0.748
	215.642		626.791											
4.00	215.642	**5.226**	626.791	**5.335**	42.0	53.0	45.0	49.0	29.58	4.51	**0.98**	**1.58**	1.174	0.765
	220.868		632.126											

Average: **0.98** **1.64**

FORMULAS

$$Y_i = \frac{(V_w)(P_b)(T_d + 460)}{(V_d)\left(P_b + \frac{H}{13.6}\right)(T_w + 460)}$$

$$\Delta H@i = \frac{0.9244}{K_m^{\,2}}$$

$$K_m = Q_m \sqrt{\frac{(P_b)(29)}{(T_{do} + 460)(\Delta H)}}$$

$$Q_m = \frac{(V_d)(T_{do} + 460)}{(Time)(T_{do} + 460)}$$

CATALYST AIR MANAGEMENT, INC

Barometer Calibration Check
UGI

DATE: 3/30/04
CALIBRATED BY: Williams

Hg in glass Barometer (in Hg)	29.90
Field Barometer (in Hg)	29.88
Difference	-0.02

CATALYST AIR MANAGEMENT, INC

K-TYPE THERMOCOUPLE CALIBRATION

Post test Calibration Check
UGI

DATE: 4-9-04
CALIBRATED BY: Williams

AVG STACK TEMPERATURE: 327

Thermocouple No:	**DA 0043**
Std Therometer	331
Thermocouple	330
Difference	1

CATALYST AIR MANAGEMENT, INC

DA 0043
Rotation Check

CALIBRATED BY: Derrera/Williams

DATE: 4/5/04

	Angle
Probe Head	0
Probe End	0

CATALYST AIR MANAGEMENT, INC

CAM 3D-01
Pressure Calibrations

DATE: 3/27/01
CALIBRATED BY: Nicely

YAW Magnehelic

Std Manometer	0.9	0.00	-0.9
YAW Magnehelic	0.9	0.00	-0.9

P1-P2 Manometer

Std Manometer	1.5	0.00
Manometer	1.5	0.00

P4-P5 Manometer

Std Manometer	1.5	0.00
Manometer	1.5	0.00

P4-P5 Manometer

Std Manometer	0.15	0.00
Manometer	0.15	0.00

CATALYST AIR MANAGEMENT, INC

CAM 3D-01
Pressure Calibrations

DATE: 4/9/04
CALIBRATED BY: Williams

YAW Magnehelic

Std Manometer	1.0	0.00	-1.0
YAW Magnehelic	1.0	0.00	-1.0

P1-P2 Manometer

Std Manometer	1.5	0.00
Manometer	1.5	0.00

P4-P5 Manometer

Std Manometer	1.0	0.00
Manometer	1.0	0.00

P4-P5 Manometer

Std Manometer	0.15	0.00
Manometer	0.15	0.00

Table 1. Summary of F1 and F2 Calibration Coefficients

Prism Shaped Probe (DA0043) Calibration - 2/11/2004
Environmental Supply Company Wind Tunnel

	Average of 2 repetitions at each velocity					
Pitch Angle	60 ft/sec		90 ft/sec		60-90 ft/sec Average	
(degrees)	F1	F2	F1	F2	F1	F2
-30	-0.5849	1.1117	-0.5543	1.1150	**-0.5696**	1.1134
-25	-0.4733	1.1025	-0.4558	1.1099	**-0.4645**	1.1062
-20	-0.3598	1.0892	-0.3502	1.0962	**-0.3550**	1.0927
-15	-0.2745	1.0821	-0.2706	1.0885	**-0.2725**	1.0853
-10	-0.1767	1.0521	-0.1685	1.0532	**-0.1726**	1.0527
-5	-0.0775	1.0249	-0.0726	1.0364	**-0.0750**	1.0306
0	-0.0217	1.0196	-0.0073	1.0269	**-0.0145**	1.0233
5	0.0261	1.0159	0.0338	1.0264	**0.0299**	1.0211
10	0.0937	1.0264	0.1019	1.0399	**0.0978**	1.0332
15	0.1649	1.0307	0.1715	1.0446	**0.1682**	1.0376
20	0.2284	1.0075	0.2436	1.0118	**0.2360**	1.0096
25	0.3290	0.9981	0.3565	1.0242	**0.3428**	1.0112
30	0.4534	1.0158	0.4745	1.0289	**0.4639**	1.0223

Table 2. Test Data and Calculated F1 and F2 Coefficients

Prism Shaped Probe (DA0043) Calibration - 2/11/2004
Environmental Supply Company Wind Tunnel

P_{bar} (in. Hg)	Rep #	Nom. Velocity	Pitch Angle	Std. Pitot (in. H2O)	P1-P2 (in. H2O)	P4-P5 (in. H2O)	Yaw Angle	Tunnel Temp.	F1	F2
29.62	1	60 ft/sec	-30	0.834	0.676	-0.400	-1.7	48	-0.5912	1.1109
			-25	0.834	0.687	-0.325	-1.8	48	-0.4729	1.1017
			-20	0.834	0.700	-0.253	-1.7	48	-0.3615	1.0918
			-15	0.834	0.709	-0.197	-1.7	48	-0.2780	1.0843
			-10	0.834	0.754	-0.134	-1.8	48	-0.1777	1.0517
			-5	0.834	0.793	-0.060	-1.6	48	-0.0761	1.0253
			0	0.834	0.806	-0.018	-1.9	48	-0.0226	1.0171
			5	0.834	0.809	0.024	-1.9	48	0.0292	1.0152
			10	0.834	0.792	0.074	-1.9	48	0.0930	1.0264
			15	0.834	0.784	0.128	-2.0	48	0.1625	1.0311
			20	0.834	0.824	0.188	-2.0	48	0.2276	1.0062
			25	0.834	0.840	0.276	-2.0	48	0.3290	0.9967
			30	0.834	0.809	0.366	-2.3	48	0.4519	1.0152
29.62	2	60 ft/sec	-30	0.834	0.674	-0.390	-1.6	48	-0.5786	1.1125
			-25	0.834	0.685	-0.324	-1.8	48	-0.4736	1.1034
			-20	0.834	0.706	-0.253	-1.8	48	-0.3581	1.0865
			-15	0.834	0.715	-0.194	-1.7	48	-0.2709	1.0800
			-10	0.834	0.753	-0.132	-1.7	48	-0.1756	1.0525
			-5	0.834	0.795	-0.063	-1.9	48	-0.0788	1.0245
			0	0.834	0.798	-0.017	-1.9	48	-0.0209	1.0221
			5	0.834	0.807	0.019	-1.8	48	0.0230	1.0165
			10	0.834	0.791	0.075	-1.9	48	0.0945	1.0265
			15	0.834	0.785	0.131	-2.0	48	0.1672	1.0304
			20	0.834	0.819	0.188	-2.0	48	0.2291	1.0088
			25	0.834	0.835	0.275	-2.1	48	0.3289	0.9996
			30	0.834	0.807	0.367	-2.2	48	0.4550	1.0164
29.62	1	90 ft/sec	-30	1.872	1.505	-0.832	-1.8	48	-0.5525	1.1150
			-25	1.872	1.518	-0.691	-1.7	48	-0.4554	1.1103
			-20	1.872	1.566	-0.544	-1.7	48	-0.3476	1.0933
			-15	1.872	1.588	-0.423	-1.7	48	-0.2667	1.0858
			-10	1.872	1.704	-0.282	-1.8	48	-0.1652	1.0480
			-5	1.872	1.748	-0.131	-1.8	48	-0.0752	1.0349
			0	1.872	1.783	-0.016	-1.9	48	-0.0087	1.0246
			5	1.872	1.782	0.057	-1.9	48	0.0319	1.0248
			10	1.872	1.727	0.178	-2.0	48	0.1033	1.0410
			15	1.872	1.719	0.294	-1.9	48	0.1709	1.0433
			20	1.872	1.842	0.446	-2.0	48	0.2421	1.0079
			25	1.872	1.788	0.632	-2.1	48	0.3534	1.0232
			30	1.872	1.759	0.839	-2.2	48	0.4770	1.0315
29.62	2	90 ft/sec	-30	1.871	1.505	-0.837	-1.8	48	-0.5561	1.1151
			-25	1.871	1.520	-0.693	-1.7	48	-0.4562	1.1096
			-20	1.871	1.549	-0.547	-1.7	48	-0.3529	1.0991
			-15	1.871	1.571	-0.431	-1.7	48	-0.2745	1.0913
			-10	1.871	1.671	-0.287	-1.8	48	-0.1718	1.0584
			-5	1.871	1.737	-0.122	-1.8	48	-0.0701	1.0380
			0	1.871	1.766	-0.011	-1.9	48	-0.0060	1.0293
			5	1.871	1.771	0.063	-1.9	48	0.0356	1.0279
			10	1.871	1.734	0.174	-2.0	48	0.1006	1.0388
			15	1.871	1.711	0.294	-1.9	48	0.1721	1.0458
			20	1.871	1.814	0.445	-2.0	48	0.2451	1.0157
			25	1.871	1.780	0.640	-2.1	48	0.3597	1.0252
			30	1.871	1.777	0.839	-2.2	48	0.4719	1.0262
						Average	-2	degrees		

Table 3. Percent Difference Between Replicates

Prism Shaped Probe (DA0043) Calibration - 2/11/2004
Environmental Supply Company Wind Tunnel

Pitch Angle (degrees)	F2 at 60 ft/sec			F2 at 90 ft/sec		
	Rep 1	Rep 2	% Diff	Rep 1	Rep 2	% Diff
-30	1.1109	1.1125	0.1	1.1150	1.1151	0.0
-25	1.1017	1.1034	0.2	1.1103	1.1096	0.1
-20	1.0918	1.0865	0.5	1.0933	1.0991	0.5
-15	1.0843	1.0800	0.4	1.0858	1.0913	0.5
-10	1.0517	1.0525	0.1	1.0480	1.0584	1.0
-5	1.0253	1.0245	0.1	1.0349	1.0380	0.3
0	1.0171	1.0221	0.5	1.0246	1.0293	0.5
5	1.0152	1.0165	0.1	1.0248	1.0279	0.3
10	1.0264	1.0265	0.0	1.0410	1.0388	0.2
15	1.0311	1.0304	0.1	1.0433	1.0458	0.2
20	1.0062	1.0088	0.3	1.0079	1.0157	0.8
25	0.9967	0.9996	0.3	1.0232	1.0252	0.2
30	1.0152	1.0164	0.1	1.0315	1.0262	0.5

Note : Only 2 replicates are required if the % difference in F2 is < 2%.

Table 4. Comparison of F2 Values Between 60 and 90 ft/sec Velocities

Prism Shaped Probe (DA0043) Calibration - 2/11/2004
Environmental Supply Company Wind Tunnel

Pitch Angle (degrees)	% Difference in Avg. F2
-30	0.3
-25	0.7
-20	0.6
-15	0.6
-10	0.1
-5	1.1
0	0.7
5	1.0
10	1.3
15	1.3
20	0.4
25	2.6
30	1.3

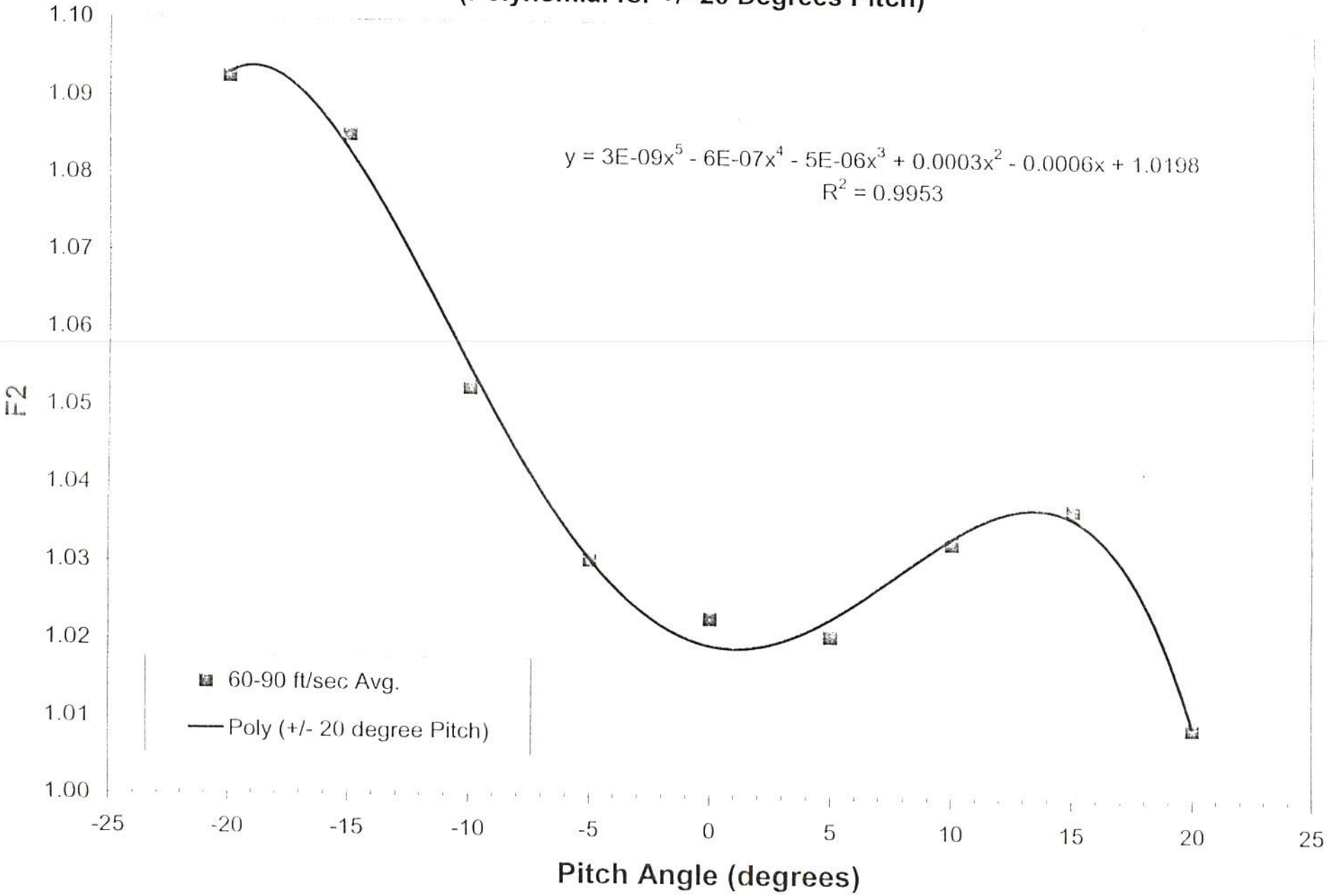
% Difference = [F2(max) - F2(min) / F2(min)] x 100

Specifications: < 3% within -15 to +15 degrees pitch
< 5% beyond -15 and +15 degrees pitch

Prism Shaped Probe (S/N DA0043) - F2 vs Pitch Angle

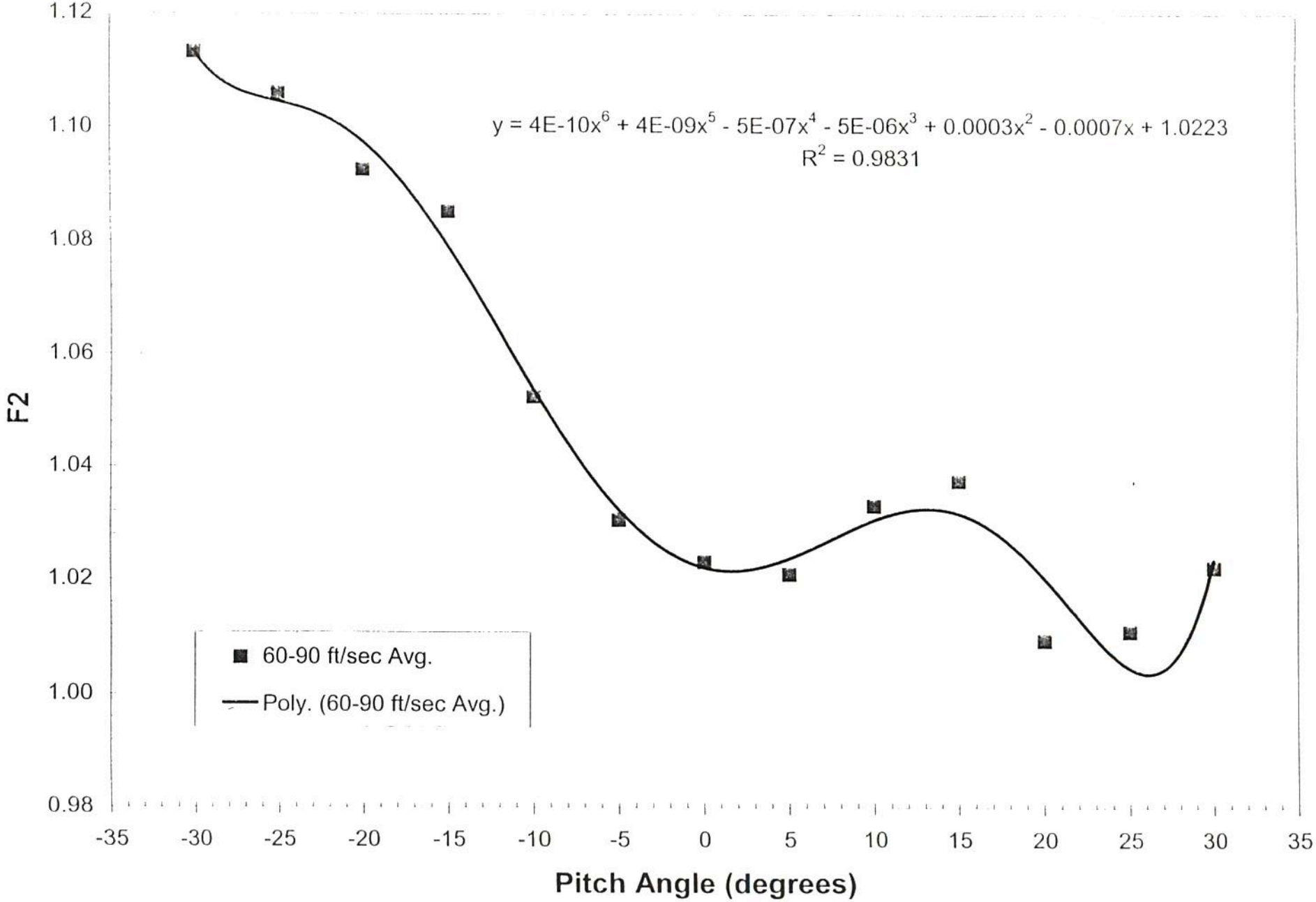
Environmental Supply Co. Wind Tunnel Calibration - 2/11/2004

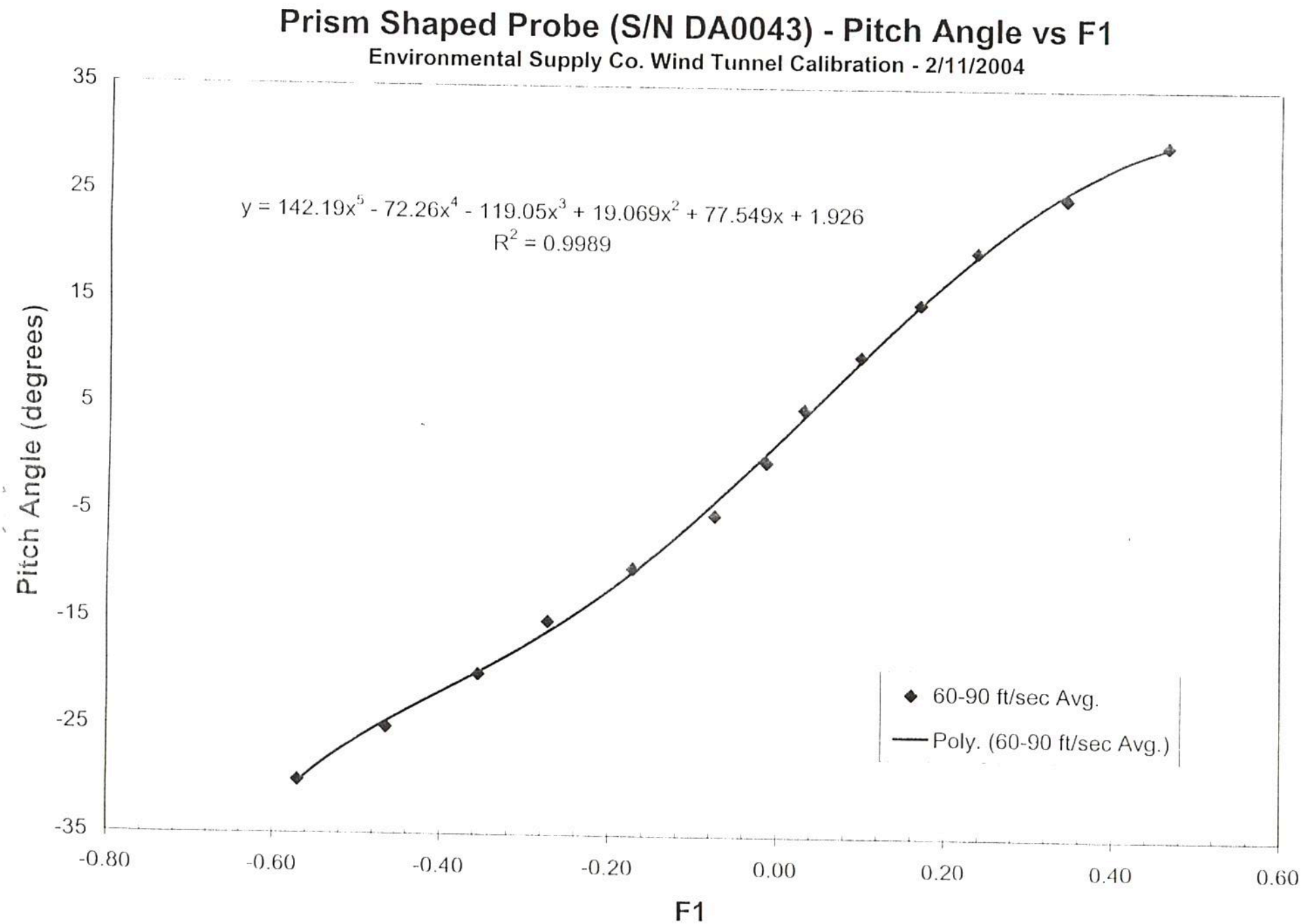
(Polynomial for +/- 20 Degrees Pitch)



Prism Shaped Probe (S/N DA0043) - F2 vs Pitch Angle

Environmental Supply Co. Wind Tunnel Calibration - 2/11/2004




Prism Shaped Probe (S/N DA0043) - Pitch Angle vs F1
Environmental Supply Co. Wind Tunnel Calibration - 2/11/2004
y = 142.19x^5 - 72.26x^4 - 119.05x^3 + 19.069x^2 + 77.549x + 1.926
R^2 = 0.9989
Pitch Angle (degrees)
35
25
15
5
-5
-15
-25
-35
-0.80
-0.60
-0.40
-0.20
0.00
0.20
0.40
0.60
F1
60-90 ft/sec Avg.
Poly. (60-90 ft/sec Avg.)

APPENDIX 5
SAMPLE CALCULATIONS

SAMPLE EQUATIONS
FOR CEMS RELATIVE ACCURACY TEST AUDITS

CALCULATIONS FOR FLUE GAS VOLUME AND MOISTURE

Time	Dry Gas Meter Ft^3	Pitot ΔP In. H_2O	Orifice ΔH In. H_2O	Dry Gas Temp.°F In Out	Flue Gas Static Pressure In. H_2O	Stack Temp °F
T	V_m	Δp	ΔH	TMI TMO	P_g	T_s

1. P_{bar} = Barometric Pressure (in. Hg)

2. TT = Net Sampling Time (minutes)

3. V_m = V_m Final - V_m Initial = Sample Gas Volume (Ft^3)

4. T_m = Average Dry Gas Temperature at Meter (°F)

$$T_m = \frac{Avg.TMI + Avg.TMO}{2}$$

5. Δp = Velocity head of stack gas (in. H_2O)

6. ΔH = Average Orifice Pressure Drop (in.H_2O)

7. Volume of dry gas sampled at standard conditions[a] (DSCF)

$$V_{m(std)} = \frac{(17.64)(V_m)(Y)\left(P_{bar} + \frac{\Delta H}{13.6}\right)}{(T_m + 460)}$$

8. V_{lc} = Total Water Collected = gm H_2O Silica gel + ml Imp. H_2O = ml

9. Volume of water vapor at standard conditions[b] (SCF)

$$V_{w(std)} = 0.0471(V_{lc}) = SCF$$

10. Percent moisture in flue gas

$$\%M = \frac{100(V_{w(std)})}{V_{m(std)} + V_{w(std)}}$$

11. Mole fraction of water vapor in flue gas

$$B_{ws} = \frac{\%M}{100}$$

12. Molecular Weight of dry flue gas

$$M_d = 0.44(\%CO_2) + 0.32(\%O_2) + 0.28(\%N_2 + \%CO)$$

13. Molecular weight of wet flue gas

$$M_s = M_d(1 - B_{ws}) + 18(B_{ws})$$

14. A = Cross-sectional area of stack (Ft^2)

$$\frac{\pi r^2}{144}$$

15. P_s = Flue gas pressure (in. Hg)

$$P_s = P_{bar} + P_g$$

NOTE: $$P_g(Hg) = \frac{P_g(in.H_2O)}{13.6}$$

16. T_s = Absolute stack temperature (°R)

$$T_s = 460 + t_s$$

17. Flue velocity at stack conditions (FT/SEC)

$$V_s = (K_p)(C_p)\left[\left(\sqrt{\Delta p}\right)avg\right]\sqrt{\frac{T_s(avg)}{P_s * M_s}}$$

C_p = pitot tube coefficient
K_p = pitot tube constant = 85.49ft/sec

18. Flue gas volumetric flow rate at standard conditions[b] (SCFM)

$$Q_s = (V_s)(A)\left(\frac{528}{T_s(avg.)}\right)\left(\frac{P_s}{29.92}\right)(60)$$

19. Flue gas volumetric flow rate at standard conditions[c] (DSCFM)

$$Q_{sd} = (1 - B_{ws})(V_s)(A)\left(\frac{528}{T_s(avg.)}\right)\left(\frac{P_s}{29.92}\right)(60)$$

20. Flue gas volumetric flow rate at stack conditions (ACFM)

$$Q_a = (V_s)(A)(60)$$

NOTES:
[a]Dry standard cubic feet at 68°F, 29.92 in. Hg
[b]Standard conditions at 68°F, 29.92 in. Hg
[c]Dry standard cubic feet per minute at 68°F, 29.92 in. Hg

CALCULATION FOR GAS CONCENTRATION

GAS CONCENTRATION (C_{gas})

$$C_{gas} = \left(\overline{C} - C_0\right)\left(\frac{C_{ma}}{C_m - C_0}\right)$$

C_{gas}	=	Effluent gas concentration, ppm
$\overline{C}$	=	Average gas concentration indicated by gas analyzer, dry basis, ppm
C_0	=	Average of initial and final system calibration bias check responses for the zero gas, ppm
C_m	=	Average of initial and final system calibration bias check responses for the upscale calibration gas, ppm
C_{ma}	=	Actual concentration of the upscale calibration gas, ppm

GAS CONCENTRATION @ 15% O_2 (C_{gas} @ 15% O_2)

$$C_{gas} @ 15\% O_2 = C_{gas} * ((20.9-15)/(20.9-\%O_2))$$

GAS CONCENTRATION @ 7% O_2 (C_{gas} @ 7% O_2)

$$C_{gas} @ 7\% O_2 = C_{gas} * ((20.9-7)/(20.9-\%O_2))$$

GAS CONCENTRATION @ 3% O_2 (C_{gas} @ 3% O_2)

$$C_{gas} @ 3\% O_2 = C_{gas} * ((20.9-3)/(20.9-\%O_2))$$

LBS/MMBTU CALCULATIONS USING THE F-FACTOR

1. EMISSION RATE *E(lb/mmbtu)*, O_2 based

$$E(lb/mmbtu) = C \times F_d \left(\frac{20.9}{20.9 - \%O_2} \right)$$

Where:

C(lb/dscf) = Pollutant concentration (ppm) x conversion factor.

Conversion Factors:

NOx = 1.194×10^{-7}

SO_2 = 1.660×10^{-7}

CO = 7.274×10^{-8}

C_3H_8 = 1.145×10^{-7}

F_d*(dscf/mmbtu)* = "F" Factor for fuel type, (Ref. EPA Method 19)

F_d (Coal) = 9780

F_d (Gas) = 8710

F_d (Oil) = 9190

2. EMISSION RATE *E(lb/mmbtu)*, CO_2 based

$$E(lb/mmbtu) = C \times F_c \left(\frac{100}{\%CO_2} \right)$$

Where:

C(lb/dscf) = Pollutant concentration (ppm) x conversion factor.

Conversion Factors:

NOx = 1.194×10^{-7}

SO2 = 1.660×10^{-7}

CO = 7.274×10^{-8}

C_3H_8 = 1.145×10^{-7}

F_c*(dscf/mmbtu)* = "F" Factor for fuel type, (Ref. EPA Method 19)

F_d (Coal) = 1800

F_d (Gas) = 1040

F_d (Oil) = 1420

F-FACTOR DETERMINATION

THE WET F-FACTOR (F_w):

Includes all components of combustion

$$F_w = \frac{10^6\ Btu / mmBtu\left[5.57(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O_2) + 0.21(\%H_2O)\right]}{GCV_{wet}}$$

THE DRY F-FACTOR (F_d):

Includes all components of combustion less water

$$F_d = \frac{10^6\ Btu / mmBtu\left[3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O_2)\right]}{GCV_{dry}}$$

THE CARBON F-FACTOR (F_c):

Includes only Carbon Dioxide

$$F_c = \frac{10^6\ Btu / mmBtu\left[0.321(\%C)\right]}{GCV_{dry}}$$

References for the above equations (i.e. %H, %C, %N, %S, %O_2) can be found in 40 CFR Part 60, Appendix A, Method 19.

CALCULATION OF RELATIVE ACCURACY

ARITHMETIC MEAN (OF THE DIFFERENCE , {d}, OF A DATA SET)

$$\bar{d} = \frac{1}{n}\sum_{i=1}^{n} d_i$$

Where n = Number of data points.

ALGEBRAIC SUM (OF THE INDIVIDUAL DIFFERENCES, $\{d_i\}$)

$$\sum_{i=1}^{n} d_i$$

STANDARD DEVIATION, S_d

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left(\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right)}{n-1}}$$

CONFIDENCE COEFFICIENT, CC

$$CC = t_{0.975}\frac{S_d}{\sqrt{n}}$$

For 9 tests $t_{0.975} = 2.306$

For 10 tests $t_{0.975} = 2.262$

For 11 tests $t_{0.975} = 2.228$

For 12 tests $t_{0.975} = 2.201$

RELATIVE ACCURACY, RA

$$RA = \frac{|\bar{d}| + |CC|}{\overline{RM}} x100$$

Run 1 High

CALCULATION QUALITY ASSURANCE CHECK

$C_{NO_x} = (195.05 - 0.57)(446.3/(446.555 - 0.57)) = 192.8$

$C_{SO_2} = (1155.03 - 5.31)(889.0/(889.975 - 5.31)) = 1135.7$

$C_{CO_2} = (9.75 - 0.035)(\cancel{12.44}\ 10.00/(9.95 - 0.035)) = 12.9$

$E_{NO_x} = (192.8)(1867)(1.194 \times 10^{-7})(100/12.9) = \cancel{0.0}\ 0.333$

$V_{mstd} = \dfrac{(17.64)(21.401)(0.98)(29.85 + 103/156)}{(460 + 63)} = 21.183$

$V_{wstd} = 0.0471(26) = 1.225$

$\% M = (100)(1.225)/(1.225 + 21.183) = 5.47$

$B_{ws} = 5.47/100 = 0.0547$

$C_{SO_2\,wet} = 1135.7(1 - 0.0547) = 1073.6$

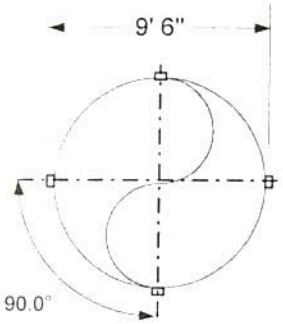
$C_{CO_2\,wet} = 12.9(1 - 0.0547) = 12.2$

APPENDIX 6
FIGURES

CATALYST
AIR MANAGEMENT, INC.

TRAVERSE POINTS (Typ 4 Ports)
FLOW
(Inches) from inside of stack.

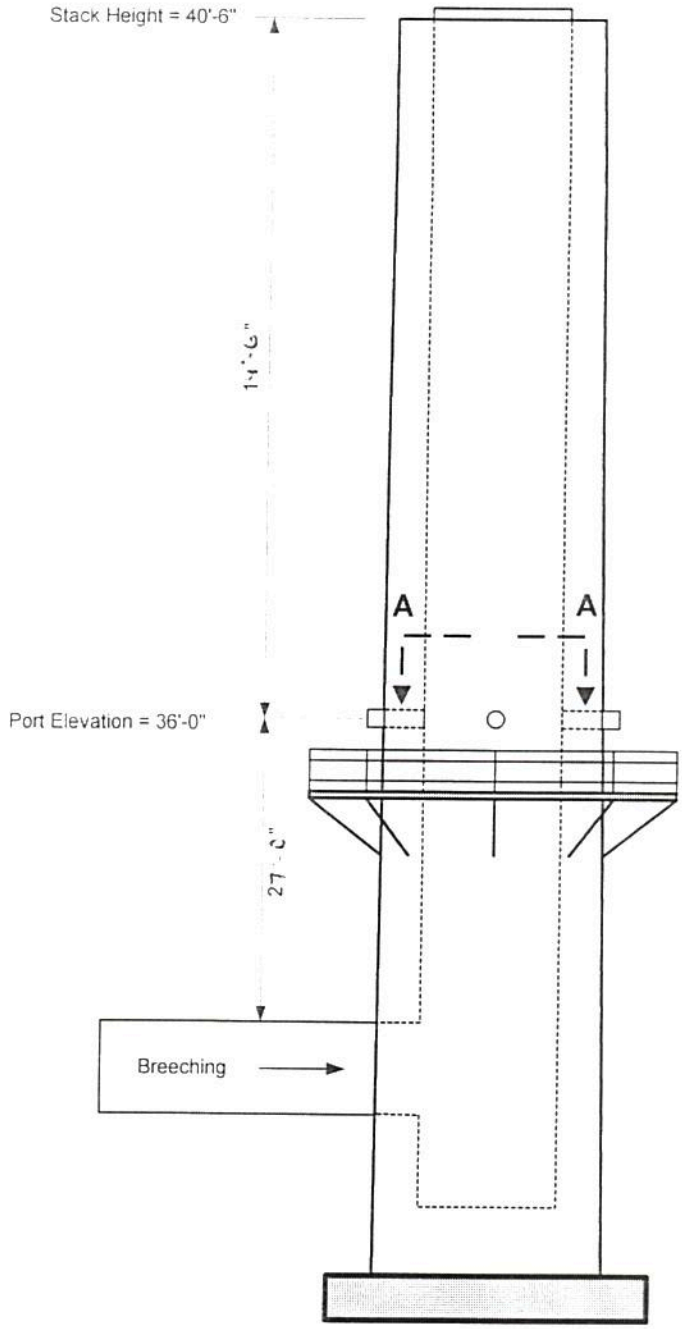
1. 3.6"
2. 12.0"
3. 22.1"
4. 36.8"



SECTION A - A

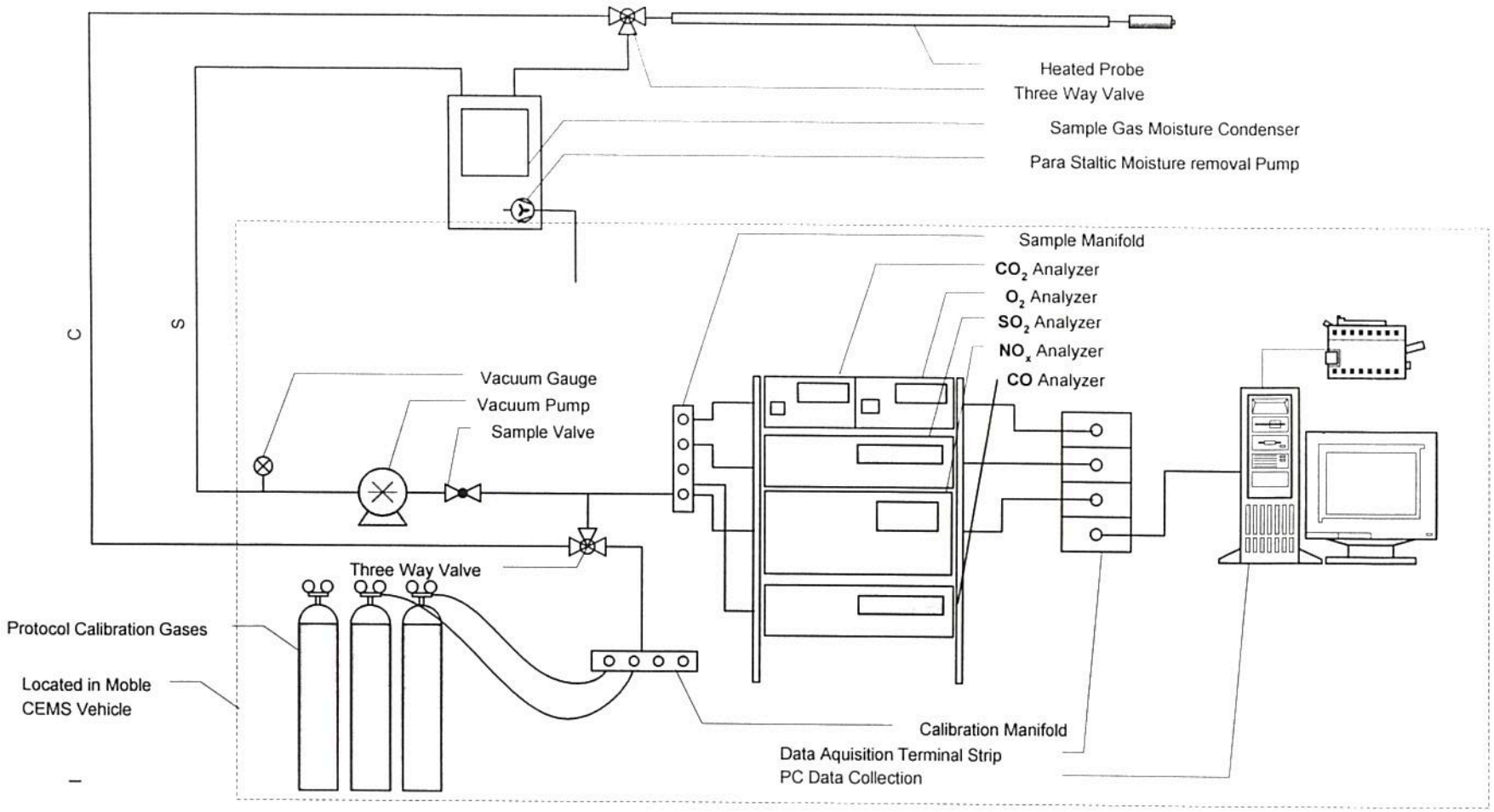
TRAVERSE POINTS (Typ 4 Ports)
(meters) from inside of stack.

1. 0.4
2. 1.2
3. 2.0



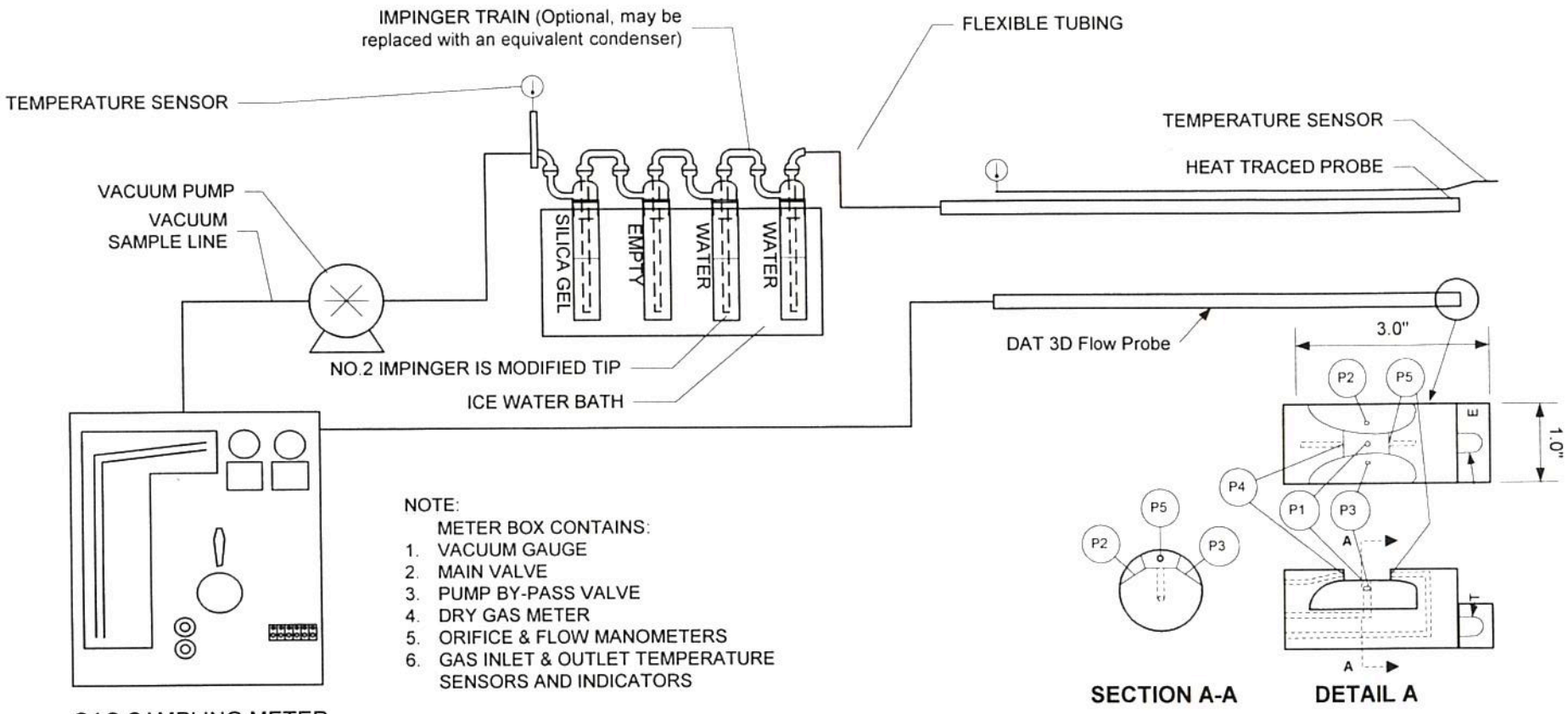
TITLE		
UGI DEVELOPMENT COMPANY - HUNLOCK STATION		
DESCRIPTION		DATE
UNIT 6 TEST PORT CONFIGURATION		7/24/98
SCALE	DRAWN BY	REVISED
NONE	MJ TAYLOR	

ATALYST
AIR MANAGEMENT, INC.



TITLE		
EPA INSTRUMENTAL SAMPLE TRAIN		
DESCRIPTION		DATE
SAMPLE TRAIN SCHEMATIC		01-26-98
SCALE	DRAWN BY	REVISED
NONE	RF COBB	

CATALYST
AIR MANAGEMENT, INC.



GAS SAMPLING METER BOX

NOTE:
METER BOX CONTAINS:
1. VACUUM GAUGE
2. MAIN VALVE
3. PUMP BY-PASS VALVE
4. DRY GAS METER
5. ORIFICE & FLOW MANOMETERS
6. GAS INLET & OUTLET TEMPERATURE SENSORS AND INDICATORS

TITLE		
EPA METHOD 2F-4 SAMPLING TRAIN		
DESCRIPTION		DATE
3-D FLOW & MOISTURE		01-26-98
SCALE	DRAWN BY	REVISED
NONE	RF COBB	4/29/02