APPENDIX H
FIELD SAMPLING DATA SHEETS AND SAMPLING DATA REDUCTION WORKSHEETS

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APPENDIX H.1
AMMONIA TESTS

- **Sampling Data Reduction Worksheets**
- **Field Sampling Data Sheets**

AES GREENIDGE UNIT 4

NH3 Summary

Guarantee Testing

Location		SCRO	SCRO	SCRO
Date		03/28/07	03/28/07	03/28/07
Start Time		914	1115	1300
Stop Time		1014	1215	1400
Test Number		NH3-1	NH3-2	NH3-3
MEASURED TEST VARIABLES				
Y factor of Dry Gas Meter	-	0.991	0.991	0.991
Gas Volume	- ft^3	30.70	31.01	30.14
delta H of Dry Gas Meter	- " H_2O	0.988	0.970	0.907
Meter Temperature	- ° F	71.3	75.8	78.8
C Factor of Pitot Tube	-	0.833	0.833	0.833
Nozzle Diameter	- inches	0.313	0.313	0.313
Area of Nozzle	- ft^2	0.00053	0.00053	0.00053
Area of Stack	- ft^2			
H_2O Weight	- gm	51.0	55.7	56.4
Sample Time	- minutes	60	60	60
Barometric Pressure	- " Hg	29.83	29.85	29.85
Static Pressure	- " H_2O	-7.20	-7.20	-7.30
% Oxygen (see note)	-	3.3	4.0	4.1
% CO2 (see note)	-	15.4	14.8	14.7
% N_2 + CO (calculated)	-	81.3	81.2	81.2
Stack Temp (Dry Bulb)	- ° F	663	655	657
Stack Temp (Wet Bulb)	- ° F			
"S" Sample (rms vel head)	- " H_2O	0.232	0.230	0.215
Ammonia as NH4	- mg	2.91	6.95	7.88
CALCULATED TEST VARIABLES				
Sample Volume	- dscf	30.20	30.27	29.26
Absolute Stack Pressure	- " Hg	29.30	29.32	29.31
Absolute Stack Temperature	- ° R	1123	1115	1117
H_2O - % by Volume	- vapor			
H_2O - % by Volume	- w/ droplets	7.4	8.0	8.3
Water Volume	- std ft^3	2.40	2.62	2.66
Dry Molecular Weight	- lb/lb-mole	30.59	30.52	30.51
Wet Molecular Weight	- lb/lb-mole	29.67	29.52	29.47
% Excess Air	-	18	23	24
Mole Fraction of Dry Gas	-	0.926	0.920	0.917
Mole Fraction of Wet Gas	-	0.074	0.080	0.083
STACK FLOW RATE				
Gas Velocity, Direct	- ft/sec	38.99	38.76	37.55
ACFM	-			
DSCFM	-			
DSCFM (rounded)	-			
Excess Air Free DSCFM	-			
AMMONIA				
NH3, ppmvd	-	4.53	10.80	12.68
NH3, ppmvd @ 3% O2	-	4.61	11.44	13.51
ISOKINETICS				
% Isokinetic	-	94.5	95.2	95.5

NOTE: The %O_2 was measured by CONSOL using a Teledyne Max 5 portable electrochemical O_2 analyzer, and the % CO_2 was calculated from the measured O_2 and coal composition.

AES GREENIDGE UNIT 4

NH3 Summary

Guarantee Testing

Location		SCRO	AHI	SCRO	AHI	SCRO	AHI	SCRO	AHI
Date		05/01/07	05/01/07	05/01/07	05/01/07	05/01/07	05/01/07	05/01/07	05/01/07
Start Time		903	904	1121	1121	1335	1335	1530	1530
Stop Time		1006	1006	1235	1225	1438	1438	1635	1635
Test Number		NH3-1	NH3-1	NH3-2	NH3-2	NH3-3	NH3-3	NH3-4	NH3-4
MEASURED TEST VARIABLES									
Y factor of Dry Gas Meter	-	0.991	0.970	0.991	0.970	0.991	0.970	0.991	0.970
Gas Volume	- ft^3	29.35	33.28	30.66	31.99	30.96	34.03	31.08	33.17
delta H of Dry Gas Meter	- " H_20	0.900	1.000	0.885	1.000	0.890	1.000	0.960	1.000
Meter Temperature	- ° F	85.1	73.5	94.5	80.7	95.8	81.1	95.6	79.0
C Factor of Pitot Tube	-	0.833		0.822		0.822		0.833	
Nozzle Diameter	- inches	0.313	0.311	0.313	0.311	0.313	0.311	0.313	0.311
Area of Nozzle	- ft^2	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053
Area of Stack	- ft^2								
H_2O Weight	- gm	50.2	56.8	49.6	53.6	59.6	60.2	59.6	62.8
Sample Time	- minutes	60	60	60	60	60	60	60	60
Barometric Pressure	- " Hg	29.47	29.47	29.47	29.47	29.41	29.41	29.40	29.40
Static Pressure	- " H_20	-7.37		-7.36		-7.41		-7.49	
% Oxygen (see note)	-	7.2	5.8	7.9	6.5	7.6	5.9	7.3	5.8
% CO2 (see note)	-	11.9	13.1	11.3	12.6	11.6	13.1	11.8	13.1
% N_2 + CO (calculated)	-	80.9	81.1	80.8	80.9	80.8	81.0	80.9	81.1
Stack Temp (Dry Bulb)	- ° F	638.5		640.3		641.9		651.4	
Stack Temp (Wet Bulb)	- ° F								
"S" Sample (rms vel head)	- " H_20	0.195		0.197		0.199		0.213	
Ammonia as NH4	- mg	5.22	2.06	4.27	2.63	6.48	2.26	4.56	2.33
CALCULATED TEST VARIABLES									
Sample Volume	- dscf	27.80	31.53	28.54	29.91	28.70	31.73	28.82	31.04
Absolute Stack Pressure	- " Hg	28.93		28.93		28.87		28.85	
Absolute Stack Temperature	- ° R	1099		1100		1102		1111	
H_2O - % by Volume	- vapor								
H_2O - % by Volume	- w/ droplets	7.8	7.8	7.6	7.8	8.9	8.2	8.9	8.7
Water Volume	- std ft^3	2.36	2.68	2.34	2.52	2.81	2.84	2.81	2.96
Dry Molecular Weight	- lb/lb-mole	30.19	30.33	30.13	30.27	30.16	30.33	30.18	30.33
Wet Molecular Weight	- lb/lb-mole	29.23	29.36	29.21	29.31	29.08	29.32	29.10	29.25
% Excess Air	-	51	37	59	44	55	38	52	37
Mole Fraction of Dry Gas	-	0.922	0.922	0.924	0.922	0.911	0.918	0.911	0.913
Mole Fraction of Wet Gas	-	0.078	0.078	0.076	0.078	0.089	0.082	0.089	0.087
STACK FLOW RATE									
Gas Velocity, Direct	- ft/sec	35.84		35.59		35.92		37.82	
ACFM	-								
DSCFM	-								
DSCFM (rounded)	-								
Excess Air Free DSCFM	-								
AMMONIA									
NH3, ppmvd	-	8.84	3.07	7.04	4.14	10.63	3.35	7.45	3.53
NH3, ppmvd @ 3% O2	-	11.55	3.64	9.69	5.14	14.30	4.00	9.80	4.19
ISOKINETICS									
% Isokinetic	-	94.3		97.3		98.8		95.0	

NOTE: The $\%O_2$ was measured by CONSOL using a Teledyne Max 5 portable electrochemical O_2 analyzer, and the $\%\ CO_2$ was calculated from the measured O_2 and coal composition.

AES GREENIDGE UNIT 4

NH3 Summary

Guarantee Testing

Location		ECO	AHI	ECO	AHI	ECO	AHI
Date		05/31/07	05/31/07	06/01/07	06/01/07	06/01/07	06/01/07
Start Time		1804	1804	1018	1020	1205	1205
Stop Time		1916	1910	1104	1108	1250	1252
Test Number		NH3-1	NH3-1	NH3-2	NH3-2	NH3-3	NH3-3
MEASURED TEST VARIABLES							
Y factor of Dry Gas Meter	-	0.983	0.970	0.983	0.970	0.983	0.970
Gas Volume	- ft^3	43.18	34.16	33.62	26.83	34.02	26.75
delta H of Dry Gas Meter	- " H_2O	1.0	1.0	1.5	1.5	1.5	1.5
Meter Temperature	- ° F	106.7	104.6	95.2	97.1	100.4	102.3
C Factor of Pitot Tube	-						
Nozzle Diameter	- inches	0.194	0.181	0.194	0.181	0.194	0.181
Area of Nozzle	- ft^2	0.00021	0.00018	0.00021	0.00018	0.00021	0.00018
Area of Stack	- ft^2						
H_2O Weight	- gm	97.4	63.2	53.3	59.4	55.5	58.5
Sample Time	- minutes	60	60	40	40	40	40
Barometric Pressure	- " Hg	29.44	29.44	29.47	29.47	29.44	29.44
Static Pressure	- " H_2O						
% Oxygen	-	3.5	4.1	4.7	4.5	5.3	4.4
% Carbon Dioxide	-						
% N_2 + CO	-						
Stack Temp (Dry Bulb)	- ° F	666.9	636.8	660.5	NA	668.9	NA
Stack Temp (Wet Bulb)	- ° F						
"S" Sample (rms vel head)	- " H_2O						
Ammonia as NH4, from IC	- mg	60.32	> 1.53	50.89	2.33	41.41	2.22
Ammonia as NH4, from ISE	- mg	54.71	> 1.50	48.04	2.01	38.36	1.80
CALCULATED TEST VARIABLES							
Sample Volume	- dscf	38.99	30.55	31.06	24.37	31.11	24.05
Absolute Stack Pressure	- " Hg						
Absolute Stack Temperature	- ° R	1127	1097	1121	NA	1129	NA
H_2O - % by Volume	- vapor						
H_2O - % by Volume	- w/ droplets	10.5	8.9	7.5	10.3	7.8	10.3
Water Volume	- std ft^3	4.59	2.98	2.51	2.80	2.61	2.76
Dry Molecular Weight	- lb/lb-mole						
Wet Molecular Weight	- lb/lb-mole						
% Excess Air	-						
Mole Fraction of Dry Gas	-	0.895	0.911	0.925	0.897	0.922	0.897
Mole Fraction of Wet Gas	-	0.105	0.089	0.075	0.103	0.078	0.103
Ammonia, IC Results							
NH3, ppmvd as sampled	-	72.81	> 2.36	77.11	4.50	62.65	4.34
NH3, ppmvd @ 3% O2	-	74.90	> 2.51	85.20	4.91	71.89	4.71
Ammonia, ISE Results							
NH3, ppmvd as sampled	-	66.04	> 2.31	72.79	3.88	58.04	3.52
NH3, ppmvd @ 3% O2	-	67.93	> 2.46	80.43	4.24	66.60	3.82

Note: For Test Number NH3-1 at the air heater inlet, a portion of the line rinse was lost during sample recovery. Hence, the actual amount of NH3 present in the flue gas was likely greater than the amount determined from the recovered sample, as indicated in the spreadsheet.

AES GREENIDGE UNIT 4

NH3 Summary - Air Heater Inlet

Guarantee Testing

Location		East Duct	West Duct	East Duct	West Duct	East Duct	West Duct	East Duct	West Duct	East Duct	West Duct
Date		06/20/07	06/20/07	06/20/07	06/20/07	06/20/07	06/20/07	06/21/07	06/21/07	06/21/07	06/21/07
Start Time		935	935	1756	1755	2007	2002	1109	1110	1517	1517
Stop Time		1015	1035	1836	1835	2047	2042	1149	1150	1557	1557
Test Number		NH3-1	NH3-1	NH3-2	NH3-2	NH3-3	NH3-3	NH3-4	NH3-4	NH3-5	NH3-5
MEASURED TEST VARIABLES											
Y factor of Dry Gas Meter	-	0.970	0.983	0.970	0.983	0.970	0.983	0.970	0.983	0.970	0.983
Gas Volume	- ft^3	26.266	41.540	27.051	33.120	26.707	33.240	26.971	33.380	27.128	34.000
delta H of Dry Gas Meter	- " H_20	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Meter Temperature	- ^oF	89.9	77.2	89.1	77.6	92.7	77.2	92.7	76.3	95.9	85.4
C Factor of Pitot Tube	-										
Nozzle Diameter	- inches	0.194	0.181	0.194	0.181	0.194	0.181	0.194	0.181	0.194	0.181
Area of Nozzle	- ft^2	0.00021	0.00018	0.00021	0.00018	0.00021	0.00018	0.00021	0.00018	0.00021	0.00018
Area of Stack	- ft^2										
H_2O Weight	- gm	49.3	53.5	54.5	51.2	55.5	58.5	49.8	46.4	48.9	52.4
Sample Time	- minutes	40	50	40	40	40	40	40	40	40	40
Barometric Pressure	- " Hg	29.41	29.41	29.44	29.44	29.44	29.44	29.30	29.30	29.21	29.21
Static Pressure	- " H_20										
% Oxygen	-	4.1	7.3	3.9	5.4	3.9	6.1	4.1	6.5	4.9	6.3
% Carbon Dioxide	-										
% N_2 + CO	-										
Stack Temp (Dry Bulb)	- ^oF										
Stack Temp (Wet Bulb)	- ^oF										
"S" Sample (rms vel head)	- " H_20										
Ammonia as NH4	- mg	1.62	4.95	1.94	1.69	0.81	1.72	0.62	1.61	0.72	1.89
CALCULATED TEST VARIABLES											
Sample Volume	- dscf	24.13	39.58	24.91	31.57	24.43	31.71	24.56	31.74	24.48	31.69
Absolute Stack Pressure	- " Hg										
Absolute Stack Temperature	- ^oR										
H_2O - % by Volume	- vapor										
H_2O - % by Volume	- w/ droplets	8.8	6.0	9.3	7.1	9.7	8.0	8.7	6.4	8.6	7.2
Water Volume	- std ft^3	2.32	2.52	2.57	2.41	2.61	2.76	2.35	2.19	2.30	2.47
Dry Molecular Weight	- lb/lb-mole										
Wet Molecular Weight	- lb/lb-mole										
% Excess Air	-										
Mole Fraction of Dry Gas	-	0.912	0.940	0.907	0.929	0.903	0.920	0.913	0.936	0.914	0.928
Mole Fraction of Wet Gas	-	0.088	0.060	0.093	0.071	0.097	0.080	0.087	0.064	0.086	0.072
AMMONIA											
NH3, ppmvd as sampled	-	3.16	5.89	3.67	2.52	1.56	2.55	1.19	2.39	1.38	2.81
NH3, ppmvd @ 3% O2	-	3.37	7.75	3.86	2.91	1.64	3.09	1.27	2.97	1.55	3.44
AVERAGE NH3, ppmvd @ 3% O2	-	5.56		3.38		2.37		2.12		2.49	

AES GREENIDGE UNIT 4

NH3 Summary

Process Performance Testing - October 2007

Location		AHI	AHI	AHI	AHI
Date		10/08/07	10/09/07	10/10/07	10/11/07
Start Time		840	807	802	812
Stop Time		940	909	904	912
Test Number		NH3-1	NH3-2	NH3-3	NH3-4
MEASURED TEST VARIABLES					
Y factor of Dry Gas Meter	-	0.991	0.991	0.991	0.991
Gas Volume	- ft^3	31.80	33.30	33.14	33.63
delta H of Dry Gas Meter	- " H_20	1.0	1.0	1.0	1.0
Meter Temperature	- ° F	89.4	88.3	80.2	76.9
C Factor of Pitot Tube	-				
Nozzle Diameter	- inches	0.276	0.276	0.276	0.276
Area of Nozzle	- ft^2	0.00042	0.00042	0.00042	0.00042
Area of Stack	- ft^2				
H_2O Weight	- gm	69.7	65.8	63.5	50.9
Sample Time	- minutes	60	60	60	60
Barometric Pressure	- " Hg	29.41	29.26	29.15	29.18
Static Pressure	- " H_20				
% O2	-	5.2	5.2	5.1	5.7
% CO2	-				
% N_2 + CO (calculated)	-				
Stack Temp (Dry Bulb)	- ° F				
Stack Temp (Wet Bulb)	- ° F				
"S" Sample (rms vel head)	- " H_20				
Ammonia as NH4	- mg	1.95	1.48	2.34	2.77
CALCULATED TEST VARIABLES					
Sample Volume	- dscf	29.83	31.14	31.34	32.03
Absolute Stack Pressure	- " Hg				
Absolute Stack Temperature	- ° R				
H_2O - % by Volume	- vapor				
H_2O - % by Volume	- w/ droplets	9.9	9.1	8.7	7.0
Water Volume	- std ft^3	3.28	3.10	2.99	2.40
Dry Molecular Weight	- lb/lb-mole				
Wet Molecular Weight	- lb/lb-mole				
% Excess Air	-				
Mole Fraction of Dry Gas	-	0.901	0.909	0.913	0.930
Mole Fraction of Wet Gas	-	0.099	0.091	0.087	0.070
AMMONIA					
NH3, ppmvd as sampled	-	3.08	2.24	3.51	4.07
NH3, ppmvd @ 3% O2	-	3.51	2.55	3.98	4.79

AES GREENIDGE UNIT 4

NH3 Summary

Process Performance Testing - November 2007

Location		AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI
Date		11/13/07	11/14/07	11/14/07	11/14/07	11/15/07	11/15/07	11/15/07	11/16/07	11/16/07	11/16/07
Start Time		2323	0117	0356	2311	0052	0347	0502	1240	1412	1642
Stop Time		0027	0221	0500	2355	0135	0430	0545	1326	1457	1726
Test Number		NH3-1	NH3-2	NH3-3	NH3-4	NH3-5	NH3-6	NH3-7	NH3-8	NH3-9	NH3-10
MEASURED TEST VARIABLES											
Y factor of Dry Gas Meter	-	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Gas Volume	- ft^3	33.14	33.51	33.65	22.36	22.36	26.96	27.10	25.64	25.92	26.00
delta H of Dry Gas Meter	- " H_20	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Meter Temperature	- ^{o} F	78.8	82.9	83.9	89.9	89.2	87.4	86.7	69.3	73.1	74.9
C Factor of Pitot Tube	-										
Nozzle Diameter	- inches	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.276
Area of Nozzle	- ft^2	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042
Area of Stack	- ft^2										
H_2O Weight	- gm	49.3	51.5	54.7	43.1	44.6	53.5	50.0	46.4	38.6	46.5
Sample Time	- minutes	60	60	60	40	40	40	40	40	40	40
Barometric Pressure	- " Hg	29.32	29.29	29.29	29.06	29.06	29.03	29.06	29.21	29.22	29.23
Static Pressure	- " H_20										
% Oxygen	-	7.2	7.6	7.7	5.0	5.0	5.8	5.3	5.9	5.0	5.9
% CO2	-										
% N_2 + CO (calculated)	-										
Stack Temp (Dry Bulb)	- ^{o} F										
Stack Temp (Wet Bulb)	- ^{o} F										
"S" Sample (rms vel head)	- " H_20										
Ammonia as NH4	- mg	0.13	0.10	0.08	1.64	2.57	1.91	2.30	2.96	2.68	2.87
CALCULATED TEST VARIABLES											
Sample Volume	- dscf	31.93	32.00	32.08	20.94	20.97	25.34	25.53	25.08	25.18	25.18
Absolute Stack Pressure	- " Hg										
Absolute Stack Temperature	- ^{o} R										
H_2O - % by Volume	- vapor										
H_2O - % by Volume	- w/ droplets	6.8	7.0	7.4	8.8	9.1	9.0	8.4	8.0	6.7	8.0
Water Volume	- std ft^3	2.32	2.43	2.58	2.03	2.10	2.52	2.36	2.19	1.82	2.19
Dry Molecular Weight	- lb/lb-mole										
Wet Molecular Weight	- lb/lb-mole										
% Excess Air	-										
Mole Fraction of Dry Gas	-	0.932	0.930	0.926	0.912	0.909	0.910	0.916	0.920	0.933	0.920
Mole Fraction of Wet Gas	-	0.068	0.070	0.074	0.088	0.091	0.090	0.084	0.080	0.067	0.080
AMMONIA											
NH3, ppmvd	-	0.19	0.15	0.12	3.69	5.77	3.55	4.24	5.56	5.01	5.36
NH3, ppmvd @ 3% O2	-	0.25	0.20	0.16	4.14	6.50	4.21	4.87	6.63	5.64	6.40

AES GREENIDGE UNIT 4

NH3 Summary

Process Performance Testing - March 2008

Location		AHI	AHI	AHI	AHI
Date		03/10/08	03/13/08	03/13/08	03/13/08
Start Time		1440	900	1150	1420
Stop Time		1550	1005	1255	1525
Test Number		NH3-1	NH3-2	NH3-3	NH3-4
MEASURED TEST VARIABLES					
Y factor of Dry Gas Meter	-	0.990	0.990	0.990	0.990
Gas Volume	- ft^3	34.28	33.79	34.31	34.48
delta H of Dry Gas Meter	- " H_20	1.0	1.0	1.0	1.0
Meter Temperature	- ° F	79.4	81.4	84.5	88.8
C Factor of Pitot Tube	-				
Nozzle Diameter	- inches	0.281	0.281	0.281	0.281
Area of Nozzle	- ft^2	0.00043	0.00043	0.00043	0.00043
Area of Stack	- ft^2				
H_2O Weight	- gm	43.6	65.5	62.1	63.1
Sample Time	- minutes	60	60	60	60
Barometric Pressure	- " Hg	29.74	29.38	29.29	29.18
Static Pressure	- " H_20				
% Oxygen	-	5.0	5.3	5.6	5.9
% CO2	-				
% N_2 + CO (calculated)	-				
Stack Temp (Dry Bulb)	- ° F				
Stack Temp (Wet Bulb)	- ° F				
"S" Sample (rms vel head)	- " H_20				
Ammonia as NH4	- mg	3.44	3.83	3.68	3.10
CALCULATED TEST VARIABLES					
Sample Volume	- dscf	33.08	32.10	32.31	32.10
Absolute Stack Pressure	- " Hg				
Absolute Stack Temperature	- ° R				
H_2O - % by Volume	- vapor				
H_2O - % by Volume	- w/ droplets	5.8	8.8	8.3	8.5
Water Volume	- std ft^3	2.05	3.09	2.92	2.97
Dry Molecular Weight	- lb/lb-mole				
Wet Molecular Weight	- lb/lb-mole				
% Excess Air	-				
Mole Fraction of Dry Gas	-	0.942	0.912	0.917	0.915
Mole Fraction of Wet Gas	-	0.058	0.088	0.083	0.085
AMMONIA					
NH3, ppmvd	-	4.89	5.61	5.36	4.55
NH3, ppmvd @ 3% O2	-	5.51	6.44	6.27	5.42

AES GREENIDGE UNIT 4

NH3 Summary

Process Performance Tests - May 2008

Location		AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI	AHI
Date		05/20/08	05/21/08	05/21/08	05/21/08	05/21/08	05/21/08	05/21/08	05/22/08	05/22/08	VOID	05/22/08
Start Time		2313	0100	0328	0453	0708	0801	0912	0103	0207		0458
Stop Time		0011	0145	0416	0545	0753	0856	0957	0158	0258		0555
Test Number		NH3-1	NH3-2	NH3-3	NH3-4	NH3-5	NH3-6	NH3-7	NH3-8	NH3-9	NH3-10	NH3-11
MEASURED TEST VARIABLES												
Y factor of Dry Gas Meter	-	0.988	0.988	0.988	1.002	0.985	1.002	0.985	0.985	1.002		0.985
Gas Volume	- ft^3	23.01	22.45	23.07	23.58	22.66	23.01	22.48	23.15	25.14		23.21
delta H of Dry Gas Meter	- " H_20	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
Meter Temperature	- ^{o} F	92.5	92.7	92.6	98.8	89.4	98.6	91.2	84.0	92.2		85.0
C Factor of Pitot Tube	-											
Nozzle Diameter	- inches											
Area of Nozzle	- ft^2											
Area of Stack	- ft^2											
H_2O Weight	- gm	41.5	31.1	46.8	44.5	40.6	43.4	40.1	35.0	32.5		42.2
Sample Time	- minutes	40	40	40	40	40	40	40	40	40		40
Barometric Pressure	- " Hg	28.88	28.85	28.88	28.88	28.88	28.88	28.88	28.94	28.94		28.97
Static Pressure	- " H_20											
% Oxygen	-	5.4	6.4	5.7	7.2	4.7	5.6	5.1	7.5	7.6		7.7
% CO2	-											
% N_2 + CO (calculated)	-											
Stack Temp (Dry Bulb)	- ^{o} F											
Stack Temp (Wet Bulb)	- ^{o} F											
"S" Sample (rms vel head)	- " H_20											
Ammonia as NH4	- mg	1.25	1.26	1.05	0.67	1.76	0.61	1.20	0.06	0.06		0.04
CALCULATED TEST VARIABLES												
Sample Volume	- dscf	21.02	20.48	21.07	21.60	20.75	21.08	20.51	21.45	23.35		21.50
Absolute Stack Pressure	- " Hg											
Absolute Stack Temperature	- ^{o} R											
H_2O - % by Volume	- vapor											
H_2O - % by Volume	- w/ droplets	8.5	6.7	9.5	8.8	8.4	8.8	8.4	7.1	6.2		8.5
Water Volume	- std ft^3	1.95	1.46	2.20	2.10	1.91	2.04	1.89	1.65	1.53		1.99
Dry Molecular Weight	- lb/lb-mole											
Wet Molecular Weight	- lb/lb-mole											
% Excess Air	-											
Mole Fraction of Dry Gas	-	0.915	0.933	0.905	0.912	0.916	0.912	0.916	0.929	0.938		0.915
Mole Fraction of Wet Gas	-	0.085	0.067	0.095	0.088	0.084	0.088	0.084	0.071	0.062		0.085
AMMONIA												
NH3, ppmvd	-	2.80	2.90	2.35	1.46	3.99	1.36	2.75	0.13	0.12		0.09
NH3, ppmvd @ 3% O2	-	3.23	3.58	2.76	1.91	4.41	1.59	3.12	0.18	0.16		0.12

AES GREENIDGE UNIT 4
NH3 Summary
Follow-Up Testing

Location		AHI	AHI	AHI	AHI
Date		06/12/08	06/12/08	06/13/08	06/13/08
Start Time		1010	1355	1030	1505
Stop Time		1115	1510	1135	1615
Test Number		NH3-1	NH3-2	NH3-3	NH3-4
MEASURED TEST VARIABLES					
Y factor of Dry Gas Meter	-	1.002	1.002	1.002	1.002
Gas Volume	- ft^3	32.68	33.76	33.91	34.74
delta H of Dry Gas Meter	- " H_2O	1.0	1.0	1.0	1.0
Meter Temperature	- ° F	81.1	87.6	96.1	105.2
C Factor of Pitot Tube	-				
Nozzle Diameter	- inches	0.258	0.258	0.258	0.258
Area of Nozzle	- ft^2	0.00036	0.00036	0.00036	0.00036
Area of Stack	- ft^2				
H_2O Weight	- gm	58.4	63.6	64.7	70.6
Sample Time	- minutes	60	60	60	60
Barometric Pressure	- " Hg	29.59	29.65	29.65	29.62
Static Pressure	- " H_2O				
% Oxygen	-	4.8	5.5	4.5	4.9
% CO2	-				
% N_2 + CO (calculated)	-				
Stack Temp (Dry Bulb)	- ° F				
Stack Temp (Wet Bulb)	- ° F				
"S" Sample (rms vel head)	- " H_2O				
Ammonia as NH4	- mg	3.70	4.36	2.75	3.36
CALCULATED TEST VARIABLES					
Sample Volume	- dscf	31.67	32.39	32.04	32.25
Absolute Stack Pressure	- " Hg				
Absolute Stack Temperature	- ° R				
H_2O - % by Volume	- vapor				
H_2O - % by Volume	- w/ droplets	8.0	8.5	8.7	9.3
Water Volume	- std ft^3	2.75	3.00	3.05	3.33
Dry Molecular Weight	- lb/lb-mole				
Wet Molecular Weight	- lb/lb-mole				
% Excess Air	-				
Mole Fraction of Dry Gas	-	0.920	0.915	0.913	0.907
Mole Fraction of Wet Gas	-	0.080	0.085	0.087	0.093
AMMONIA					
NH3, ppmvd	-	5.50	6.34	4.04	4.90
NH3, ppmvd @ 3% O2	-	6.13	7.34	4.41	5.48

AMMONIA SAMPLING FIELD DATA SHEET

Page ____ of ____

TEST ID	ONE	METER BOX	N-5	CAL. DATA: delta H	1.883
PLANT	GREENIDGE	PITOT TUBE DESC	E-11A : 0.833	Y	0.991
LOCATION	SCR OUTLET	PROBE LENGTH [ft]	8	C(p)	0.833
DATE	3/28/07	NOZZLE ID [inch]	0.313	FILTER BOX SETTING	NA
OPERATOR(S)	B. GREEN & R. DOUGLAS	%H_2O (Assumed)	10%	PROBE HTR SETTING	
AMBIENT TEMP [°F]		FILTER ID	901000	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.83	K FACTOR	~~4.38~~ 4.22	DUCT DIMENSIONS	DUCT AREA

Comments: Cad 51.0

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F] (1)	PROBE TEMP [°F]	~~FILTER BOX~~ LINE TEMP [°F]	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0914	0					580.516								
1-~~8~~ 6'		10	-7.1	0.23	1.0	3	585.9	69	70	660	254	276	57	3.0	~~17.9~~ 17.1
1-~~8~~ 6'		20		0.23	0.97	4	591.0	71	71	661	260	281	52	2.9	~~18.0~~ 17.1
1-~~8~~ 5'		30	-7.2	0.20	.84	5	595.4	71	72	644	265	282	54	3.2	16.8
1-~~8~~ 5'		40		0.20	.84	7	600.7	72	72	645	257	282	58	3.3	16.7
1-~~8~~ 3'		50	-7.2	0.27	1.14	13	606.1	72	72	684	262	282	63 RPF	3.8	16.2
1-~~8~~ 3'		60		0.27	1.14	18	611.214	72	71	684	261	281	66	3.8	16.2
			-7.2												
AVERAGE			RMS	0.232	0.988		30.698		71.3	663.0				3.3	16.7

Sample Train Leak Checks: Pre Test 0.002 ft^3 @ 10 in. Hg; Post Test 0.004 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest ✓ @ 5 in. H_2O; Post Test ✓ @ 5 in. H_2O

CONSOL ENERGY.

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	TWO
PLANT	GREENIDGE
LOCATION	SCR OUTLET
DATE	3/28/07
OPERATOR(S)	B. GREEN & R. DOUGLAS
AMBIENT TEMP [°F]	
BAR. PRESS. [" Hg]	29.83

METER BOX	N-5
PITOT TUBE DESC	E-11A: 0.833
PROBE LENGTH [ft]	8
NOZZLE ID [inch]	0.313
%H_2O (Assumed)	10%
FILTER ID	90100dX
K FACTOR	4.22

CAL. DATA: delta H	1.883
Y	0.991
C(p)	0.833
FILTER BOX SETTING	
PROBE HTR SETTING	
DUCT X-SECTION	circ ? / rect ? / other:
DUCT DIMENSIONS	DUCT AREA

Comments: First point - probe all the way in.

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F] (1)	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1115	0					615.188								
1-~~3~~ 6		10	-7.2	0.22	0.93	2	620.4	73	76	640	254	251	58	3.8	16.3
1-~~3~~ 6		20		0.22	0.93	3	625.5	75	76	641	257	254	50	3.0	17.0
1-~~3~~ 4		30	-7.2	0.22	0.93	5	630.5	76	77	654	254	258	52	3.7	16.3
1-~~3~~ 4	0.22	40		~~0.290~~ 0.25	0.93	6	636.1	77	78	656	263	259	53	3.7	16.3
1-~~3~~ 2		50	-7.1	0.25	1.05	9	640.9	76	75	670	263	260	55	5.0	15.1
1-~~3~~ 2		60		0.25	1.05	12	646.198	76	74	670	257	260	57	5.0	15.1
										653.2					
AVERAGE			-7.2	.230	0.970		31.010			75.8				4.0	16.0

Sample Train Leak Checks: Pre Test 0.002 ft^3 @ 15 in. Hg; Post Test 0.003 ft^3 @ 15 in. Hg

Pitot Tube Leak Checks: PreTest ✓ @ 5 in. H_2O; Post Test ✓ @ 5 in. H_2O

CONSOLENERGY

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	Three
PLANT	GREENIDGE
LOCATION	SCR OUTLET
DATE	3/28/07
OPERATOR(S)	B. GREEN & R. DOUGLAS
AMBIENT TEMP [°F]	
BAR. PRESS. [" Hg]	29.85

METER BOX	N-5
PITOT TUBE DESC	611A : .853
PROBE LENGTH [ft]	8
NOZZLE ID [inch]	.313
%H_2O (Assumed)	10
FILTER ID	901002
K FACTOR	4.22

CAL. DATA: delta H	1.883	Comments:	
Y	.991		
C(p)	~~.313~~ .853		
FILTER BOX SETTING			
PROBE HTR SETTING			
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1300	0					648.871								
1-8 6'		10	~~.19~~	.19	.80	3	653.4	77	77	646	261	207	63	3.3	16.7
1-8 6'		20		.20	.84	4	658.3	78	77	648	255	225	47	3.4	16.6
1-8 4'		30	-7.2	.21	0.89	5	663.3	79	81	—	254	230	44	3.8	16.2
1-8 4"		40		.21	0.89	7	668.3	80	79	657	264	234	45	3.6	16.3
1-8 2'		50	-7.3	.24	1.01	10	673.7	80	78	666	262	235	45	5.1	15.0
1-8 2'	1400	60	-7.4	.24	1.01	13	679.011	80	80	668	262	235	45	5.2	15.0
AVERAGE			-7.3	0.215	0.907		30.14	78.3		657				4.1	16.0

Sample Train Leak Checks: Pre Test 0.004 ft^3 @ 15 in. Hg; Post Test 0.004 ft^3 @ 15 in. Hg

Pitot Tube Leak Checks: PreTest ✓ @ 5 in. H_2O; Post Test ✓ @ 5 in. H_2O

CONSOL ENERGY.

AMMONIA SAMPLING FIELD DATA SHEET

Page 1 of 1

TEST ID	NH3-1
PLANT	Greenidge
LOCATION	SCR OUTLET ~~Stack~~ West Duct
DATE	5-1-07
OPERATOR(S)	RYD RPS
AMBIENT TEMP [°F]	77°F
BAR. PRESS. [" Hg]	29.47

METER BOX	N-5
PITOT TUBE DESC	E-11 ~~NA~~
PROBE LENGTH [ft]	~~NA~~ 10
NOZZLE ID [inch]	0.313 ~~NA~~ ~~0.331~~
%H_2O (Assumed)	8
FILTER ID	~~NA~~
K FACTOR	4.42 ~~NA~~ ~~0.30~~

CAL. DATA: delta H	1.853
Y	0.991
C(p)	~~1.0~~ 0.853
FILTER BOX SETTING	NA
PROBE HTR SETTING	250 ~~NA~~
DUCT X-SECTION	circ? / rect? / other:
DUCT DIMENSIONS	
DUCT AREA	

Comments: ~~Constant Flow Rate~~

	TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0403	0					703.70								
S	N-1 3		5	-7.442	.14	.62	2"	705.90	77	78	611	252	245	54		
S	N-1 3		10		.14	.62	2	708.02	78	80	612	244	249	51	9.1	11.3
S	N-2 3		15	-7.476	.13	.58	3	710.10	80	80	632	245	251	51		
S	N-2 3		20		.13	.58	3	712.16	81	81	632	248	253	51	6.8	13.4
S	N-3 3		25	-7.257	.26	1.15	5	714.83	84	83	643	251	255	52		
S	N-3 3		30		.26	1.15	5	717.54	87	84	639	253	261	56	6.2	14.0
	3		35			moved	+ L.L.									
	3		40		~~.25~~	~~1.20~~		718.34								
N	S-1 3		35 45	-7.368	.25	1.20	6	720.88	88	81	654	247	260	59		
N	S-1 3		40 50		.25	1.20	7	723.69	90	87	662	255	259	60	6.8	13.4
N	S-2 3		45 55	-7.331	.18	.80	7	726.03	91	88	647	248	259	65		
N	S-2 3		50 60		.18	.80	8	728.44	91	89	647	247	260	63	5.4	14.6
N	S-3 3		55	-7.341	.23	1.02	11	731.11	93	89	642	250	261	69		
N	S-3 3		60 65		.23	1.02	12	733.85	93	89	641	247	261	69	5.1	15.0
	3		70													
	3		75													
	3		80													
	3		85													
	3		90													
	3		95													
	3		100													
	3		105													
	3		110													
	3		115													
	3		120		Rus											
AVERAGE				-7.37	0.195	0.90		29.35	85.1		638.5				7.2	13.6

Sample Train Leak Checks: Pre Test OK ft³ @ 10 in. Hg; Post Test OK ft³ @ 10 in. Hg

Pitot Tube Leak Checks: PreTest OK @ 7 in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOLENERGY

AMMONIA SAMPLING FIELD DATA SHEET

Page ____ of ____

TEST ID	#1	METER BOX	N-1	CAL. DATA: delta H	1.894	Comments: Constant Flow Rate	
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	0.970		
LOCATION	~~SCR OUTLET PORT~~ AIR HTR INLET	PROBE LENGTH [ft]	~~NA~~ 3	C(p)	NA		
DATE	5-1-07	NOZZLE ID [inch]	5/16 ~~Dia~~ 0.311	FILTER BOX SETTING	~~NA~~		
OPERATOR(S)	Tim, Keith	%H_2O (Assumed)	8	PROBE HTR SETTING	~~NA~~ 250		
AMBIENT TEMP [°F]	56	FILTER ID	~~NA~~ 1057	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.47	K FACTOR	~~NA~~	DUCT DIMENSIONS	6 7	DUCT AREA	2 5 4

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ H. Line [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	9:04	0					329.10								
1		5		NA	1.0	.5	331.87	69	69	~~62~~ TR	250	233	62	6.5	13.6
1	West	10				.5	334.58	69	70	~~62~~ TR	250	233	62	6.5	13.7
2		15				5.5	337.31	71	70	~~62~~ TR	250	233	62	6.3	13.9
2		20				6	340.04	73	70	~~62~~ TR	250	233	62	6.2	13.9
3		25				7	342.81	75	71		252	234	61	6.4	13.8
3		30				7	~~343.24~~ 343.09	76	71		249	235	61	6.4	13.8
4		35				7.5	~~349.11~~ ~~349.31~~	77	72		250	239	59	5.5	14.7
4		40				8	351.90	78	73		250	242	59	5.3	14.8
5	East	35	.45			8	354.62	78	73		250	242	60	5.2	14.9
5		40	.50			9	357.34	79	73		250	242	59	5.1	15.0
6		45	.55			10	360.11	79	74		250	242	59	5.3	14.8
6	10:06	50	.60			10.5	362.87	80	74		250	242	59	5.2	14.9
		55													
1		60													
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115													
6		120													
AVERAGE					1.0		33.78	73.5						5.8	14.3

Sample Train Pre Test <0.01 ft^3 @ 7 in. Hg
Leak Checks: Post Test <0.01 ft^3 @ 8 in. Hg

Pitot Tube PreTest ____ @ ____ in. H_2O
Leak Checks: Post Test ____ @ ____ in. H_2O

CONSOL ENERGY

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	NH3-2
PLANT	Greenidge
LOCATION	SCR OUTLET ~~GRID~~ E. Duct
DATE	5-1-07
OPERATOR(S)	KPW BTS
AMBIENT TEMP [°F]	50
BAR. PRESS. [" Hg]	29.47

METER BOX	N-5
PITOT TUBE DESC	E-1 / NA
PROBE LENGTH [ft]	10 / NA
NOZZLE ID [inch]	.313 / NA
%H_2O (Assumed)	8
FILTER ID	NA
K FACTOR	4.42 / NA

CAL DATA: delta H	1.883
Y	0.991
C(p)	~~NA~~ 0.833
FILTER BOX SETTING	NA
PROBE HTR SETTING	NA 250
DUCT X-SECTION	circ ? / rect ? / other:
DUCT DIMENSIONS	/ DUCT AREA

Comments: Constant Flow Rate

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet (6)	METER TEMP [oF] outlet (7)	STACK TEMP [°F] (1)	PROBE TEMP [°F] (2)	FILTER BOX [°F] (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					747.814								
N1 1	1121	5	-7.384	.23	1.02	2	750.95	90	90	665	242	227	54		
N1 2		10		.23	1.02	3	753.54	96	91	668	255	226	48	7.2	13.0
N2 1		15	-7.318	.17	.75	3	755.95	96	92	649	250	232	48		
N2 2		20		.17	.75	3	758.33	97	92	649	249	235	49	6.1	14.2
N3 1		25	-7.351	.24	1.07	4	761.07	98	93	663	249	231	50.		
N3 2		30		.24	1.07	4	763.83	99	93	661	246	231	50	6.6	13.6
4		35													
4		35		.15	.66		76775								
S1 5		40 45	-7.321	.15	.66	3	769.95	95	92	606	246	233	52		
S1 5		45 50		.15	.66	3	772.18	96	93	615	245	235	50		
S2 6		50 55	-7.311	.15	.66	4	774.45	97	93	632	251	237	49	9.8	10.2
S2 6		60		.15	.66	4	776.70	98	93	645	255	235	49		
S3 1		55	-7.451	.15, .26	1.15	5	779.42	98	93	645	256	233	49	9.7	10.6
S3 1		60 65		.26	1.15		782.39	99	93	645	248	233	49		
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115													
6		120		RMS											
AVERAGE			-7.36	0.197	0.885		30.656	94.5		640.3				7.9	12.3

Sample Train Leak Checks: Pre Test _____ ft^3 @ _____ in. Hg; Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

AMMONIA SAMPLING FIELD DATA SHEET

TEST ID	HL	METER BOX	N-1	CAL. DATA: delta H	1.894
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	0.970
LOCATION	~~SCR OUTLET GRID~~ AIR HEATER INLET	PROBE LENGTH [ft]	~~NA~~ 3	C(p)	NA
DATE	5-1-07	NOZZLE ID [inch]	5/16" ~~NA~~ 0.311	FILTER BOX SETTING	~~NA~~
OPERATOR(S)	TM, KITH	%H_2O (Assumed)	8	PROBE HTR SETTING	~~NA~~ 250
AMBIENT TEMP [°F]	~~TR~~ 56 78	FILTER ID	~~NA~~ 1038	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.47	K FACTOR	~~NA~~	DUCT DIMENSIONS	6 7 / DUCT AREA 2

Comments: Constant Flow Rate

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	~~STACK TEMP~~ [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ H.E. [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					380.50								
1	11:21	5		NA	1.0	4	383.35	80	77	~~157~~	250	245	57	6.6	13.7
1		10				4	386.07	81	77		250	247	54	6.5	13.7
2		15				4	388.82	82	77		250	248	54	6.6	13.6
2		20				5	391.58	83	78		249	248	55	6.6	13.6
3		25				5	394.34	83	78		249	249	55	6.5	13.7
3		30				5	~~391.06~~ 398.61	84	78		249	249	56	6.5	13.7
4		35				6	401.46	85	79		250	239	56	8.1	12.7
4		40				6.5	404.15	84	79		250	233	57	6.7	13.5
5		45				7	406.92	84	79		250	236	58	5.7	14.4
5		50				8	409.68	84	79		249	237	58	5.8	14.2
6		55				8	412.35	84	79		250	237	58	5.9	14.2
6	12:25	60				9	415.21	84	79		250	237	59	6.0	14.1
1		65													
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115													
6		120													
AVERAGE					1.0		31.99	80.7						6.5	13.8

Sample Train Leak Checks: Pre Test 0.01 ft^3 @ 7 in. Hg; Post Test 0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOL ENERGY

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	NH3-3	METER BOX	N-5	CAL. DATA: delta H	1.883
PLANT	Greenidge	PITOT TUBE DESC	E-11 NA	Y	0.991
LOCATION	SCR OUTLET ~~GRID~~ W. Duct	PROBE LENGTH [ft]	10 NA	C(p)	~~NA~~ .833
DATE	5-1-07	NOZZLE ID [inch]	.313 NA	FILTER BOX SETTING	NA
OPERATOR(S)	RPD BPS	%H_2O (Assumed)	8	PROBE HTR SETTING	NA 250
AMBIENT TEMP [°F]	80	FILTER ID	NA	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.40	K FACTOR	9.42 NA	DUCT DIMENSIONS	DUCT AREA

Comments: ~~Constant Flow Rate~~

59.6

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet (6)	METER TEMP [oF] outlet (7)	STACK TEMP [°F] (1)	PROBE TEMP [°F] (2)	FILTER BOX [°F] (3)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					789.41								
N1 1		5		.22 ~~NA~~	.98	2	792.23	92	91	668	243	263	54		
N1 1		10	-7.391	.22	.98	3	794.90	96	92	671	251	265	44	7.7	12.5
N2 2		15		.18	.80	3	797.38	98	92	652	251	265	44		
N2 2		20	-7.379	.18	.80	3	799.81	99	93	651	249	266	44	6.3	13.8
N3 3		25		.25	1.10	5	802.65	99	93	663	255	264	44		
N3 3		30	-7.244	.25	1.10	6	805.50	100	94	662	254	265	45	5.9	14.3
4		35													
4		40		~~.15~~	~~.66~~		808.85								
S1 5		45		.15	.66	5	809.15	99	95	614	255	267	46		
S1 5		50	-7.358	.15	.66	5	810.39	99	94	618	246	267	45	9.9	10.4
S2 6		55		.26	1.15	8	814.23	99	94	630	255	266	45	7.6	12.6
S2 6		60	-7.628	.26	1.15	10	817.12	100	94	630	255	266	46	7.6	12.6
S3				.13	.58	8	819.35	100	94	652	257	266	47	7.7	12.5
S3 1		65	-7.463	.17	.75	10	821.72	99	94	652	255	266	47	7.8	12.5
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115		0.1~~89~~9											
6		120		RUS											
AVERAGE			-7.44	~~0.196~~	0.89		30.96	95.8		641.9				7.6	12.7

Sample Train Pre Test OK ft^3 @ _____ in. Hg
Leak Checks: Post Test OK ft^3 @ _____ in. Hg

Pitot Tube PreTest OK @ _____ in. H_2O
Leak Checks: Post Test OK @ _____ in. H_2O

CONSOLENERGY

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	#3	METER BOX	N-1	CAL. DATA: delta H	1.844
PLANT	Greenidge A.H.I.	PITOT TUBE DESC	NA	Y	0.970
LOCATION	~~SGR OUTLET GRID~~ 7	PROBE LENGTH [ft]	~~NA~~ 3	C(p)	NA
DATE	5-1-07	NOZZLE ID [inch]	3/16 ~~NA~~ 0.311	FILTER BOX SETTING	NA
OPERATOR(S)	TIM, KEITH	%H_2O (Assumed)		PROBE HTR SETTING	~~NA~~ 250
AMBIENT TEMP [°F]	78	FILTER ID	~~NA~~ 1089	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.47	K FACTOR	NA	DUCT DIMENSIONS	/ DUCT AREA

Comments: Constant Flow Rate

60.2

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet (6)	METER TEMP [oF] outlet (7)	~~STACK TEMP [°F]~~	PROBE TEMP [°F] (2)	FILTER BOX [°F] (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					423.41								
1	13:35	5		NA	1.0	6	426.17	77	77		249	245	62	6.8	13.6
1		10	0.351			6	428.94	79	77		250	244	62	6.3	13.9
2		15				6	431.70	80	77		250	245	60	6.5	13.7
2		20				7	434.49	81	78		250	246	60	6.5	13.8
3		25				8	437.38	82	78		250	247	60	6.6	13.7
3		30				8	~~440.04~~ 439.54	83	78		250	247	61	6.6	13.6
4		35				7.5	446.38	85	79		250	254	61	5.6	14.2
4		40				8	449.05	86	80		250	239	61	5.0	15.1
5		45	0.351			9	451.83	86	80		249	236	61	5.2	14.9
5		50				10	454.64	87	81		249	234	61	5.2	15.0
6		55				11	457.33	87	81		249	233	61	5.1	15.0
6		60				12	460.10	87	81		249	233	61	5.0	15.0
1		65													
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115													
6		120													
AVERAGE					1.0		34.03	81.1						5.9	14.3

Sample Train Leak Checks: Pre Test 0.01 ft^3 @ 1 in. Hg; Post Test 0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOLENERGY

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	NH3-4	METER BOX	N-5	CAL. DATA: delta H	1.883
PLANT	GREENIDGE	PITOT TUBE DESC	E-11	Y	0.991
LOCATION	SCR ~~OUTLET~~ h. Duct	PROBE LENGTH [ft]	10	C(p)	.833
DATE	5-1-07	NOZZLE ID [inch]	.313	FILTER BOX SETTING	
OPERATOR(S)	~~[illegible]~~ BB & RD	%H_2O (Assumed)	8	PROBE HTR SETTING	250
AMBIENT TEMP [°F]	80	FILTER ID		DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.40	K FACTOR	4.42	DUCT DIMENSIONS	DUCT AREA

Comments:

59.6

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet (6)	METER TEMP [oF] outlet (7)	STACK TEMP [°F] (1)	PROBE TEMP [°F] (2)	FILTER BOX [°F] (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					828.00								
~~1-8"~~ N1		5 ~~20~~	-7.596	.23	1.02	2	830.88	93	91	672	254	237	55		
~~1-8"~~ N1		10 ~~20~~		.23	1.02	2	833.53	95	92	677	253	240	49	7.4	12.7
~~1-8"~~ N2		15 ~~30~~	-7.488	.19	.85	2	836.18	98	92	658	251	248	46		
~~1-8"~~ N2		20 ~~20~~		.19	.85	2	838.61	98	93	655	254	249	46	6.4	13.7
~~1-8"~~ N3		25 ~~20~~	-7.614	.25	1.10	5	841.40	99	93	668	249	243	46		
~~1-8"~~ N3		30 ~~20~~		.25	1.10	5	844.16	99	94	672	257	244	46	5.4	14.7
							845.65	~~98~~							
S-1		35	-7.474	.15	~~.15~~ .68	5	848.05	98	94	618	253	243	48		
S-1		40		.15	.68	5	850.31	98	94	621	250	244	46	9.6	10.6
S-2		45	-7.513	.28	1.25	9	853.23	99	94	635	257	245	45		
S-2		50		.28	1.25	10	856.21	100	94	635	257	245	45	7.4	12.8
S-3		55	-7.260	.19	.86	10	858.75	100	94	653	248	245	46		
S-3		60		.19	.86	12	861.29	99	94	653	255	245	46	7.4	12.8
AVERAGE			-7.49	0.213	0.96		31.80	95.6		651.4				7.3	12.9

Sample Train Leak Checks: Pre Test ____ ft^3 @ ____ in. Hg; Post Test ____ ft^3 @ ____ in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOL ENERGY.

AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	EA	METER BOX	N-1	CAL. DATA: delta H	1.894	Comments:	Constant Flow Rate
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	0.970		
LOCATION	~~SCR OUTLET GRID~~ A.H.I.	PROBE LENGTH [ft]	~~NA~~ 3	C(p)	NA		
DATE	5-1-07	NOZZLE ID [inch]	5/16 D-~~NA~~ 0.311	FILTER BOX SETTING	NA		
OPERATOR(S)	TIM, KEITH	%H_2O (Assumed)		PROBE HTR SETTING	~~NA~~ 250		
AMBIENT TEMP [°F]	70	FILTER ID	~~NA~~ 1040	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.47	K FACTOR	NA	DUCT DIMENSIONS	6 7	DUCT AREA	2 5 4

62.8

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	~~STACK TEMP~~ [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					469.31								
1	15:30	5		NA	1.0	4	472.36	80	80		251	251	62	6.8	13.4
1		10				4	475.13	81	80		249	249	57	6.5	13.7
2		15				4	477.79	82	80		249	251	58	6.7	13.5
2		20				4.5	480.30	83	80		250	251	60	6.5	13.8
3		25				4.5	482.76	84	80		250	252	61	6.6	13.6
3		30				5	485.77	85	80		250	252	61	6.3	13.9
4		35				5.5	490.92	86	81		249	251	61	5.4	14.9
4		40				6	493.67	86	81		249	252	62	5.0	15.1
5		45				7	496.42	86	81		250	252	62	4.7	15.4
5		50				8	499.31	87	81		250	252	62	4.9	15.1
6		55				8.5	502.12	87	82		250	252	62	4.8	15.2
6	16:35	60				9	504.88	87	82		250	252	62	5.1	15.0
1		65													
1		70													
2		75													
2		80													
3		85													
3		90													
4		95													
4		100													
5		105													
5		110													
6		115													
6		120													
AVERAGE					1.0		33.17	78.0						5.8	14.4

*488.11 - START TIME OF 2ND PORT

Sample Train Leak Checks: Pre Test _____ ft^3 @ _____ in. Hg; Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	Eo-1
PLANT	GREENIDGE
LOCATION	ECONOMIZER OUTLET
DATE	5-30-07
OPERATOR(S)	RPD DPS
AMBIENT TEMP [°F]	84°F
BAR. PRESS. [" Hg]	29.44

METER BOX	N-4
PITOT TUBE DESC	E-3
PROBE LENGTH [ft]	10
NOZZLE ID [inch]	3/16 C - 0.194
%H_2O (Assumed)	8
FILTER ID	1052
K FACTOR	

CAL. DATA: delta H	1.790		
Y	0.983		
C(p)	0.840		
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments: leak check was completed after port w-3 no leaks were found

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					828.005								
	1804	5	-5.1		1.0	4		108	107	657	315	210	65		
	W-1	10			1.0	5	836.18	108	107	663	322	213	60	2.6	17.3
		15			1.0	6	839.62	109	107	664	322	216	60		
							~~839.62~~								
							840.00								
		20	-5.3		1.0	7	843.49	108	106	676	319	219	61		
	W-3	25			1.0	7	847.31	108	105	682	322	225	60	7.8	12.4
		30			1.0	7	850.60	108	105	677	322	227	60		
							851.023								
		35	-5.0		1.0	8	854.38	107	105	723	321	228	65	3.6	17.4
	E-1	40			1.0	9	857.85	108	105	724	324	230	61	2.5	17.4
		45			1.0	9	861.300	108	105	730	316	231	61		
							861.300								
		50	-5.2		1.0	10	864.88	108	104	604	319	235	63	2.7	17.3
	E-2	55			1.0	11	868.35	108	104	602	323	236	61	3.1	16.9
	1916	60			1.0	11	871.563	108	104	601	318	236	61	3.0	17.0
AVERAGE							43.178		106.67	666.92				3.52	16.53

Sample Train Pre Test 0 ft^3 @ 12 in. Hg
Leak Checks: Post Test 0 ft^3 @ 6 in. Hg

Pitot Tube PreTest 0 @ 18 in. H_2O
Leak Checks: Post Test 0 @ 6 in. H_2O

CONSOL ENERGY.

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TEST ID	AHI-1	METER BOX	N-1	CAL. DATA: delta H	1.894
PLANT	GREENIDGE	PITOT TUBE DESC	NA	Y	0.970
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]	~~10~~ 4	C(p)	NA
DATE	5/30/07	NOZZLE ID [inch]	0.181	FILTER BOX SETTING	NA
OPERATOR(S)	BG & DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	101	FILTER ID	901007	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.44	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING 921.[ft³]203	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER ~~BOX~~ LINE TEMP [°F]	LAST-IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	~~1804~~	0					~~920.392~~								
WEST	1809	5	NA	NA	1.0	3	924.015	102	101	633	301	255	68	4.7	
	1814	10			1.0	4	926.820	102	101	635	323	254	68	4.4	
	1819	15			1.0	4.3	929.673	104	101	635	322	254	67	4.5	
	1824	20			1.0	5.0	932.520	105	102	634	323	254	67	4.4	
	1829	25			1.0	5.2	935.355	107	102	634	323	254	67	4.5	
	1834	30			1.0	5.8	938.218	108	102	634	323	255	67	4.9	
							-.242	[illegible]		3805				27.4	
EAST	1840						938.460								
	1845	35			1.0	6.0	941.458	108	103	635	323	248	66	3.7	
	1850	40			1.0	6.3	944.289	109	103	635	323	247	60	3.6	
	1855	45			1.0	7.0	947.072	109	103	640	325	243	58	3.6	
	1900	50			1.0	8.0	949.902	110	103	642	325	242	58	3.5	
	1905	55			1.0	8.0	952.711	109	103	642	325	242	58	3.5	
	1910	60	↓	↓	1.0	8.0	955.602	109	103	642	325	242	58	3.5	
AVERAGE							34.157		104.6	636.5				4.07	

Sample Train Pre Test 0.004 ft³ @ 10 in. Hg
Leak Checks: Post Test 0.000 ft³ @ 13 in. Hg

Pitot Tube PreTest ✓ @ ~~6~~ in. H_2O
Leak Checks: Post Test ____ @ ____ in. H_2O

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TEST ID	Econ - 2	METER BOX	N-4	CAL. DATA: delta H	1.790	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	E-3	Y	.953		
LOCATION	ECONOMIZER OUTLET	PROBE LENGTH [ft]	10 ft	C(p)			
DATE	6-1-07	NOZZLE ID [inch]	3/16 C	FILTER BOX SETTING	NA		
OPERATOR(S)	RoD ISPS	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	94°F	FILTER ID	1053	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.47	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1018	0					872.503								
		5	-5.4		1.5	4	876.63	93	93	731	321	258	67		
	E-1	10			1.5	5	880.764	94	93	737	318	269	51	3.9	16.1
		~~15~~													
							880.76								
	E-3	15 ~~20~~	-5.5		1.5	6	884.99	95	93	605	322	273	53	3.6	16.4
		20 ~~25~~			1.5	6	889.132	96	93	606	320	275	56	3.3	16.7
		~~30~~						leak check done		no leaks					
							889.400								
	W-1	25 ~~35~~	-5.7		1.5	8	893.54	98	93	678	321	267	61	4.2	15.7
		30 ~~40~~			1.5	10	897.763	98	93	681	320	266	56	4.1	15.9
		~~45~~													
							897.763								
	W-3	35 ~~50~~	-5.6		1.5	11	902.04	100	95	~~790~~ 623	321	268	58	9.4	10.9
		40 ~~55~~			1.5	12	906.391	101	95	~~756~~ 623	323	268	61	8.9	11.6
		~~50~~													
	1104														
AVERAGE			-5.55		1.5		33.62	75.2		660.5				8.7	

Sample Train Pre Test 0 ft^3 @ 15 in. Hg
Leak Checks: Post Test 0 ft^3 @ 6 in. Hg

Pitot Tube PreTest 0 @ 15 in. H_2O
Leak Checks: Post Test 0 @ 6 in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	AHI - Run 2	METER BOX	N-1	CAL. DATA: delta H	1.894	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	—	Y	0.970		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]	3	C(p)	—		
DATE	6/1/07	NOZZLE ID [inch]	3/16 B	FILTER BOX SETTING	NA		
OPERATOR(S)	BG & DC	$\%H_2O$ (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	87	FILTER ID	1055	DUCT X-SECTION	circ ? / rect ? / other:		
BAR. PRESS. [" Hg]	29.47	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA			

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE TEMP [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1020	0					956.002								
EAST	1025	5	NA	NA	1.5	6	959.724	96	91	~~517~~	325	241	60	3.4	
	1030	10			1.5	6	962.854	97	91		325	239	61	3.3	
	1035	15			1.5	6	966.023	100	92		325	239	62	3.4	
	1040	20			1.5	8	969.300	102	93		325	240	61	3.3	
PORT CHANGE		~~25~~					969.514	-.214	DGM						
		~~30~~													
	1048						969.825	-.311	DGM		326	240	60	~~5.6~~	
WEST	1053	~~35~~ 25			1.5	8.5	973.176	102	94		325	243	59	5.9	
	1058	~~40~~ 30			1.5	10	976.463	103	95		325	244	60	5.6	
	1103	~~45~~ 35			1.5	10	979.884	103	95		325	244	61	5.4	
	1108	~~50~~ 40			1.5	11.5	983.140	104	95		325	245	62	5.7	
		~~55~~													
		~~60~~	↓	↓											
AVERAGE					1.5		26.327		97.06					4.5	

Sample Train Leak Checks: Pre Test 0.002 ft^3 @ 13 in. Hg; Post Test 0.003 ft^3 @ 15 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

CONSOL ENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	Econ-3	METER BOX	N-4	CAL. DATA: delta H	1.790	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	E-3	Y	0.983		
LOCATION	ECONOMIZER OUTLET	PROBE LENGTH [ft]	10ft	C(p)			
DATE	6-1-07	NOZZLE ID [inch]	3/16 C	FILTER BOX SETTING	NA		
OPERATOR(S)	RPD BPS	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	940	FILTER ID	1054	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.44	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1205	0					907.000								
		5	-5.3		1.5	5	911.25	99	98	~~320~~ 678	~~201~~ 320	201	66	4.8	15.3
	W-1	10			1.5	6	915.434	99	98	683	321	209	55	4.3	15.8
		~~15~~													
							915.434								
		15 ~~20~~	-5.7		1.5	7	919.66	101	98	643	322	216	57	9.8	10.5
	W-3	20 ~~25~~			1.5	8	~~924.092~~ 923.98	103	98	644	321	219	56	9.6	10.7
		~~30~~					leak check was done			No leaks found					
							924.300								
		25 ~~35~~	-5.4		1.5	9	928.54	103	98	736	318	224	65	3.7	16.3
	E-1	30 ~~40~~			1.5	10	932.764	104	99	743	318	226	63	3.5	16.4
		~~45~~													
							932.764								
		35 ~~50~~	-5.6		1.5	12	937.27	105	99	612	315	227	65	3.7	16.3
	E-3	40 ~~55~~			1.5	13	941.521	105	100	612	319	228	66	3.0	17.0
		~~60~~													
	1250														
AVERAGE			-5.5		1.5		34.201	100.4		668.9				5.3	

Sample Train Leak Checks: Pre Test 0 ft^3 @ 12 in. Hg; Post Test 0 ft^3 @ 6 in. Hg

Pitot Tube Leak Checks: PreTest 0 @ 19 in. H_2O; Post Test 0 @ 6 in. H_2O

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TEST ID	AHI - Run 3	METER BOX	N-1	CAL. DATA: delta H	1.894
PLANT	GREENIDGE	PITOT TUBE DESC	NA	Y	0.970
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]	3	C(p)	—
DATE	6/1/2007	NOZZLE ID [inch]	3/16 B	FILTER BOX SETTING	NA
OPERATOR(S)	BG & DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	90	FILTER ID	1056	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.44	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE TEMP [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1205	0					986.520								
WEST	1210	5	NA	NA	1.5	8	989.913	103	98		325	231	67	5.6	
	1215	10			1.5	8.5	993.287	104	98		325	233	63	5.5	
	1220	15			1.5	9.5	996.654	107	99		324	241	64	5.4	
	1225	20			1.5	10	999.956	107	99		325	239	65	5.4	
		~~25~~													
		~~30~~													
	1232						1000.320								
EAST	1237	25 ~~35~~			1.5	11	1003.708	104	99		326	242	66	3.8	
	1242	30 ~~40~~			1.5	11	1007.038	105	99		325	241	61	3.3	
	1247	35 ~~45~~			1.5	13	1010.382	107	99		325	241	62	3.2	
	1252	40 ~~50~~			1.5	15	1013.632	108	100		325	242	63	3.1	
		~~55~~													
		~~60~~													
AVERAGE					1.5		26.748		102.3					4.4	

Sample Train Pre Test 0.008 ft^3 @ 15 in. Hg
Leak Checks: Post Test 0.007 ft^3 @ 18 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test ____ @ ____ in. H_2O

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TEST ID	Run 1 -East	METER BOX	1	CAL. DATA: delta H	1.894
PLANT	GREENIDGE	PITOT TUBE DESC	—	Y	0.970
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]	3	C(p)	—
DATE	6/20/07	NOZZLE ID [inch]	3/16"	FILTER BOX SETTING	NA
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	84	FILTER ID		DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.41	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ LINE BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0935	0					15.106								
EAST	0940	5	NA	NA	1.5	5	18.493	86	84	NA	326	252	57	4.1	
	0945	10			1.5	6.2	21.790	90	85	NA	323	252	50	4.0	
	0950	15			1.5	6.6	25.025	92	86	NA	324	253	52	4.1	
	0955	20			1.5	7.5	28.217	94	87	NA	324	253	55	4.2	
	1000	25			1.5	8.5	31.414	95	87	NA	325	251	54	4.0	
	1005	30			1.5	10	34.802	96	87	NA	325	251	54	4.2	
	1010	35			1.5	11	38.613	96	88	NA	325	252	54	4.2	
	1015	40			1.5	13	41.372	97	88	NA	325	252	54	3.9	
		~~35~~													
		~~40~~													
		~~45~~													
		~~50~~													
		~~55~~													
		~~60~~													
AVERAGE					1.5	8.5	26.266		89.9		324.6	252	53.8	4.1	

Sample Train Leak Checks: Pre Test 0.004 ft^3 @ 12 in. Hg; Post Test 0.005 ft^3 @ 13 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	TEST # 1	METER BOX	N-4	CAL. DATA: delta H	1.790	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	NA	Y	0.983		
LOCATION	~~AIR HEATER INLET~~ ~~SCRUBBER OUTLET~~ WEST	PROBE LENGTH [ft]	3 1/2'	C(p)			
DATE	~~6-19-07~~ 6-20-07	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	BPS	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	~85°	FILTER ID	1058	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.41	K FACTOR	NA	DUCT DIMENSIONS		DUCT AREA	

1.5 943.60 (6) (7) (2) LINE (5) (4)

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0935	0					~~942.60~~								
		5	NA	NA	~~1.0~~	5	946.78	77	72	NA	340	224	57	—	—
		10			1.5	5	950.92	78	72		340	227	57	9.0	—
		15				6	952.50 L.C.	78	74		321	230	60	5.6	—
							956.80			*	HIGH O2 - CHANGED FITTING				
											AT 10 MIN. L.C. "OK"				
		20			1.5	7	960.91	80	74		322	232	61	5.7	—
		25			1	8	965.03	81	75		322	234	63	6.6	—
		30			1	8	969.15	81	75		322	234	64	6.8	—
		35			1.5	9	973.28	81	75		322	235	65	7.0	—
		40			1	9.5	977.41	81	75		322	235	66	7.8	—
		45			1	9.5	981.56	81	76		322	235	67	8.3	—
	1035	50			1.5	10	985.72	81	76		323	235	67	8.8	—
		55			1										
		60													
AVERAGE					1.5	7.7	41.54		77.2		325.6	232.1	62.7	7.3	

Sample Train Leak Checks: Pre Test 0.15 ft^3 @ 10 in. Hg – (0.060 ft^3) (50 min)
Post Test 0.060 ft^3 @ 10 in. Hg = (38.54 ft^3)
leak correction

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

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TEST ID	Run 2 - East
PLANT	GREENIDGE
LOCATION	AIR HEATER INLET
DATE	6/20/07
OPERATOR(S)	BWG
AMBIENT TEMP [°F]	86
BAR. PRESS. [" Hg]	29.41

METER BOX	1
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3
NOZZLE ID [inch]	3/16 E
%H_2O (Assumed)	8
FILTER ID	
K FACTOR	NA

CAL. DATA: delta H	1.894		
Y	0.970		
C(p)	–		
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ LINE BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1756	0					42.203								
	1801	5	NA	NA	1.5	5	45.624	87	86	NA	325	223	64	4.0	
	1806	10			1.5	6	48.975	89	86	NA	325	224	58	4.0	
	1811	15			1.5	7	52.338	89	86		325	225	59	3.9	
	1816	20			1.5	8	55.716	91	86		325	225	59	3.9	
	1821	25			1.5	8	59.224	91	87		325	226	60	3.9	
	1826	30			1.5	9	—	94	87		325	226	60	3.8	
	1831	35			1.5	10	65.763	95	87		325	227	60	3.9	
	1836	40	↓	↓	1.5	12	69.254	96	88	↓	325	227	62	4.0	
		~~55~~													
		~~40~~													
		45													
		~~50~~													
		55													
		~~60~~													
AVERAGE					1.5	8.1	27.051	89.1		NA	325	225.4	60.3	3.9	

Sample Train Leak Checks: Pre Test 0.001 ft^3 @ 15 in. Hg; Post Test 0.061 ft^3 @ 18 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	TEST # 2
PLANT	GREENIDGE
LOCATION	~~ECONOMIZER OUTLET~~ A.H. INLET WEST
DATE	6-20-07
OPERATOR(S)	B.P.S.
AMBIENT TEMP [°F]	~86.0
BAR. PRESS. [" Hg]	29.41

METER BOX	N-4
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3 1/2'
NOZZLE ID [inch]	
%H_2O (Assumed)	8
FILTER ID	
K FACTOR	NA

CAL DATA: delta H	1.790		
Y	0.983		
C(p)			
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ [°F] LINES (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					987.50								
	1755	5	NA	NA	1.5	6	991.70	77	76	NA	324	216	69	—	—
		10				7	995.84	77	76		323	220	67	5.4	—
		15				8	999.96	78	76		325	225	67	5.3	—
		20			1.5	9	004.06	79	76		330	226	68	—	—
		25				10	008.20	80	76		333	227	68	5.3	—
		30				11	012.34	80	76		332	228	66	5.4	—
		35			1.5	12	016.48	80	77		334	228	66	5.4	—
	1835	40				13	020.62	81	77		334	229	66	5.4	—
		45													
		50													
		55													
		60													
AVERAGE					1.5	9.5	33.12		77.6		329.4	224.9	67.1	5.4	

Sample Train Pre Test OK ft^3 @ 15 in. Hg
Leak Checks: Post Test OK ft^3 @ 15 in. Hg

Pitot Tube PreTest — @ — in. H_2O
Leak Checks: Post Test — @ — in. H_2O

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TEST ID	TEST 3 - EAST
PLANT	GREENIDGE
LOCATION	AIR HEATER INLET
DATE	6/20/07
OPERATOR(S)	BWG
AMBIENT TEMP [°F]	87
BAR. PRESS. [" Hg]	29.44

METER BOX	1
PITOT TUBE DESC	
PROBE LENGTH [ft]	3
NOZZLE ID [inch]	3/16
%H_2O (Assumed)	8
FILTER ID	
K FACTOR	

CAL. DATA: delta H	1.894		
Y	0.970		
C(p)	—		
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ LINE BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	2007	0					69.775								
	2012	5	NA	NA	1.5	5	73.282	89	87	NA	326	183	57	3.8	
	2017	10			1.5	6	77.729	95	88		325	190	59	4.0	
	2022	15			1.5	8	79.774	97	89		325	198	60	3.9	
	2027	20			1.5	8	83.281	98	89		325	202	60	3.9	
	2032	25			1.5	9	86.748	98	89		325	218	63	3.9	
	2037	30			1.5	9	89.952	98	89		325	217	64	4.0	
	2042	35			1.5	10	93.236	98	90		325	186	67	3.9	
	2047	40	✓	✓	1.5	12	96.482	99	90	✓	325	181	67	4.0	
		~~35~~													
		~~40~~													
		~~45~~													
		~~50~~													
		~~55~~													
		~~60~~													
AVERAGE					1.5	8.4	26.707		92.7		325.1	196.9	62.1	3.9	

Sample Train Leak Checks: Pre Test 0.000 ft^3 @ 15 in. Hg
Post Test 0.015 ft^3 @ 17 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

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EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	TEST # 3
PLANT	GREENIDGE
LOCATION	~~ECONOMIZER OUTLET~~
DATE	6-20-07
OPERATOR(S)	BPS
AMBIENT TEMP [°F]	~850
BAR. PRESS. [" Hg]	29.44

METER BOX	N-4
PITOT TUBE DESC	NA
A.H. PROBE LENGTH [ft]	3 1/2'
INLET NOZZLE ID [inch]	
WEST %H_2O (Assumed)	8
FILTER ID	1062
K FACTOR	NA

CAL DATA: delta H	1.790	Comments:	
Y	0.983		
C(p)			
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ [°F] LINE (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	2002	0					021.20								
		5	NA	NA	1.5	5	025.40	76	75	NA	327	210	60	—	—
		10				6	029.47	77	75		324	217	57	5.4	—
		15				7	033.63	78	75		322	224	60	5.6	—
		20			1.5	7.5	037.79	79	76		322	227	60	—	—
		25				8	041.93	80	76		322	229	61	6.0	—
		30				9	046.09	80	76		323	230	62	6.3	—
		35			1.5	11	050.24	80	76		322	230	62	6.5	—
	2042	40				11	054.44	80	76		324	231	62	6.6	—
		45													
		50													
		55													
		60													
AVERAGE					1.5	8.1	33.24		77.2		323.3	224.8	60.5	6.1	

Sample Train Leak Checks: Pre Test OK ft^3 @ 15 in. Hg; Post Test OK ft^3 @ 11 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	Run 4 - EAST
PLANT	GREENIDGE
LOCATION	AIR HEATER INLET
DATE	6/21/07
OPERATOR(S)	BWS
AMBIENT TEMP [°F]	92
BAR. PRESS. [" Hg]	29.30

METER BOX	1
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3'
NOZZLE ID [inch]	3/16 E
%H_2O (Assumed)	8
FILTER ID	
K FACTOR	

CAL. DATA: delta H	1.894		
Y	0.970		
C(p)			
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER-BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1109	0					97.244								
	1114	5	NA	NA	1.5	5.5	100.683	94	90	NA	329	238	61	3.9	
	1119	10			1.5	6	104.216	92	86		329	237	57	4.1	
	1124	15			1.5	7	107.330	95	87		330	238	59	4.0	
	1129	20			1.5	7.5	110.697	97	88		329	239	62	3.9	
	1134	25			1.5	8.5	114.695	97	88		328	241	64	4.1	
	1139	30			1.5	9.5	117.458	99	89		324	244	66	4.1	
	1144	35			1.5	10	120.856	100	90		324	245	65	4.2	
	1149	40	↓	↓	1.5	12	124.215	100	91	↓	326	246	62	4.3	
		~~35~~													
		~~40~~													
		~~45~~													
		~~50~~													
		~~55~~													
		~~60~~													
AVERAGE					1.5	8.3	26.971		92.7		327.4	241.0	62.0	4.1	

Sample Train Leak Checks: Pre Test 0.002 ft^3 @ 15 in. Hg; Post Test 0.016 ft^3 @ 17 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	TEST #4	METER BOX	N-4	CAL. DATA: delta H	1.790
PLANT	GREENIDGE	PITOT TUBE DESC	NA	Y	0.983
LOCATION	~~ECONOMIZER OUTLET~~ A.H.	PROBE LENGTH [ft]	3 1/2'	C(p)	
DATE	6-21-07	NOZZLE ID [inch]	INLET	FILTER BOX SETTING	NA
OPERATOR(S)	BPS	%H_2O (Assumed)	WEST	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	~83.0	FILTER ID	1065	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.32	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ [°F] LINE (5)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1110	0					055.20								
		5	NA	NA	1.5	6	059.39	74	72	NA	324	215	56	—	—
		10				7	063.54	75	72		322	219	56	6.0	—
		15				8	067.68	77	73		323	223	57	6.0	—
		20			1.5	9	071.88	79	74		323	226	59	6.1	—
		25				10	076.03	80	74		323	227	60	6.4	—
		30				11	080.23	81	75		323	229	60	6.5	—
		35			1.5	11	084.40	81	75		323	229	61	7.4	—
	1150	40				12	088.58	82	76		324	229	62	7.4	—
		45													
		50													
		55													
		60													
AVERAGE					1.5	9.3	33.38		76.3		323.1	224.6	58.9	6.5	

Sample Train Leak Checks: Pre Test 0.15 ft^3 @ 15 in. Hg; Post Test 0.15 ft^3 @ 12 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	EAST RUN 5	METER BOX	1	CAL. DATA: delta H	1.899	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	NA	Y	0.970		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]	3	C(p)			
DATE	6/21/07	NOZZLE ID [inch]	3/16C	FILTER BOX SETTING	NA		
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	92	FILTER ID		DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.21	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ LINE BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1517	0					124.600								
EAST	1522	5	NA	NA	1.5	5	128.146	91	91	NA	333	244	52		
	1527	10			1.5	5	131.438	95	92		327	240	51		
	1532	15			1.5	6	134.778	96	92		335	239	51	4.9	
	1537	20			1.5	6	138.174	98	93		329	240	51	4.8	
	1542	25			1.5	8	141.632	101	94		329	241	52	4.8	
	1547	30			1.5	8	144.037	102	94		329	241	53	4.8	
	1552	35			1.5	9	148.384	103	95		324	242	54	4.9	
	1557	40	↓	↓	1.5	10	151.728	102	95	↓	325	243	55	4.9	
		35													
		40													
		45													
		50													
		55													
		60													
AVERAGE					1.5		27.128	95.9						4.9	

Sample Train Leak Checks: Pre Test 0.001 ft^3 @ 12 in. Hg; Post Test 0.001 ft^3 @ 16 in. Hg

Pilot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	TEST #5	METER BOX	~-4	CAL. DATA: delta H	1.790	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC	~A	Y	0.983		
LOCATION	~~ECONOMIZER OUTLET~~ A.H.	PROBE LENGTH [ft]	3'/2'	C(p)			
DATE	6-21-07 INLET	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	BPS WEST	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	~90°	FILTER ID	1050	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.21	K FACTOR	~A	DUCT DIMENSIONS	(6) (7)	DUCT AREA	(3) LINE (5) (4)

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1516	0					089.50								
		5	~A	~A	1.5	6	093.78	84	83	~A	334	254	59	—	—
		10			1	6.5	098.03	84	83		334	257	56	5.8	—
		15				7	102.28	86	83		334	260	59	5.7	—
		20			1.5	8	106.52	87	84		335	261	62	—	—
		25			1	9	110.73	89	84		335	263	63	6.6	—
		30				9.5	114.97	89	84		335	263	63	6.7	—
		35			1.5	10	119.26	89	84		336	264	63	6.6	—
	1556	40			1	11	123.50	89	84		336	264	64	6.6	—
		45													
		50													
		55													
		60													
AVERAGE					1.5		34.00		85.4					6.3	

Sample Train Pre Test OK ft^3 @ 15 in. Hg
Leak Checks: Post Test OK ft^3 @ 12 in. Hg

Pitot Tube PreTest — @ — in. H_2O
Leak Checks: Post Test — @ — in. H_2O

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TEST ID	RUN ONE	METER BOX	N-5	CAL. DATA: delta H	
PLANT	AES Greenidge	PITOT TUBE DESC	NA	Y	
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA
DATE	10/8/07	NOZZLE ID [inch]	.276	FILTER BOX SETTING	NA
OPERATOR(S)	BG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	0840	FILTER ID	1090	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.41	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: N-5 New cal data on File.

Sample ID's: 201, 202, 203, 204, 205

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ Heated Line [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0840	0					431.684								
W		5	NA	NA	1.0	2	434.1	84	86		352	208	67	5.3	
		10	–	–	1.0	4	439.2	87	87		349	215	68	4.9	
		15	–	–	1.0	5	441.92	88	87		353	210	68		
		20	–	–	1.0	5	441.9	89	88		348	212	68		
		25	–	–	1.0	5	444.6	89	89		350	212	67		
		30	–	–	1.0	5	447.213	90	89		348	210	66	5.1	
E		35	–	–	1.0	7	450.0	90	90		354	216	59	5.3	
		40	–	–	1.0	7	453.5	90	90		349	210	58		
		45	–	–	1.0	8	455.4	92	90		349	210	57		
		50	–	–	1.0	8	458.0	92	90		351	211	57		
		55	–	–	1.0	9	459.9	92	91		352	213	57		
		60	–	–	1.0	10	463.479	93	92		348	215	58	5.2	
AVERAGE					1.0		31.795	89.4						5.2	

Sample Train Leak Checks: Pre Test 0.000 ft^3 @ 10 in. Hg
Post Test 0.004 ft^3 @ 16 in. Hg

Pitot Tube Leak Checks: PreTest NA @ ____ in. H_2O
Post Test NA @ ____ in. H_2O

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TEST ID	RUN 2
PLANT	AES Greenidge
LOCATION	Air Heater Inlet
DATE	10/9/07
OPERATOR(S)	BG & KC
AMBIENT TEMP [°F]	82
BAR. PRESS. [" Hg]	29.26

METER BOX	N-5
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3
NOZZLE ID [inch]	.276
%H_2O (Assumed)	8
FILTER ID	1095
K FACTOR	NA

CAL. DATA: delta H	ON		
Y	File		
C(p)	NA		
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ LINE BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0807	0					465.103								
E		5	–	–	1.0	3	467.9	84	85	–	355	194	68	5.8	
		10	–	–	1.0	3	470.7	85	85	–	353	209	66		
		15	–	–	1.0	4	473.7	87	86	–	350	220	65	5.1	
		20	–	–	1.0	4	476.3	87	86	–	353	222	66		
		25	–	–	1.0	4.5	479.0	89	87	–	352	224	65	5.3	
		30	–	–	1.0	5	481.681	90	89	–	349	225	65		
W		35	–	–	1.0	5	484.6	90	89	–	347	225	67	5.1	
		40	–	–	1.0	7	487.3	90	89	–	351	224	66		
		45	–	–	1.0	8	490.1	91	90	–	348	224	66	5.0	
		50	–	–	1.0	8	492.8	91	90	–	350	224	66		
		55	–	–	1.0	10	495.6	91	90	–	352	225	67	4.7	
	0909	60	–	–	1.0	11	498.401	90	89	–	350	225	67		
AVERAGE					1.0		33.298	88.3						5.2	

Sample Train Leak Checks: Pre Test .004 ft^3 @ 15 in. Hg
Post Test .003 ft^3 @ 15 in. Hg

Pitot Tube Leak Checks: PreTest NA @ ____ in. H_2O
Post Test NA @ ____ in. H_2O

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TEST ID	RUN 3	METER BOX	N-5	CAL. DATA: delta H	ON
PLANT	AES Greenidge	PITOT TUBE DESC	NA	Y	F1/2
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA
DATE	10/10/07	NOZZLE ID [inch]	.276	FILTER BOX SETTING	NA
OPERATOR(S)	BG + KC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	72	FILTER ID	1098	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.15	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: 267A+B, 268A+B, 269, 270, 271, 26A

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0802	0					498.609								
W		5	–	–	1.0	2	501.5	73	74		352	201	50	5.3	
		10	–	–	1.0	3	504.3	76	75		354	202	47		
		15	–	–	1.0	4	507.0	78	77		353	203	47	5.8	
		20	–	–	1.0	4	509.7	80	78		353	211	48		
		25	–	–	1.0	5	512.4	80	79		354	215	50	5.9	
		30	–	–	1.0	5	515.210	81	80		353	217	52		
E	834	35	–	–	1.0	6	518.0	81	81		354	220	54	4.9	
		40	–	–	1.0	7	520.8	83	81		348	222	52	4.7	
		45	–	–	1.0	7	523.5	83	82		348	225	52		
		50	–	–	1.0	8	526.2	84	83		349	226	52	4.7	
		55	–	–	1.0	9	529.0	84	83		348	227	52		
	904	60	–	–	1.0	10	531.753	84	84		348	227	53	4.5	
AVERAGE					1.0		33.144	80.2						5.1	

Sample Train Leak Checks: Pre Test .008 ft^3 @ 15 in. Hg; Post Test ____ ft^3 @ ____ in. Hg

Pitot Tube Leak Checks: PreTest NA @ ____ in. H_2O; Post Test NA @ ____ in. H_2O

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TEST ID	Test 4	METER BOX	N-5	CAL. DATA: delta H	ON
PLANT	AES Greenidge	PITOT TUBE DESC	NA	Y	File
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	
DATE	10/11/07	NOZZLE ID [inch]	.276	FILTER BOX SETTING	NA
OPERATOR(S)	BG + KC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	70	FILTER ID	1101	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.18	K FACTOR	NA	DUCT DIMENSIONS / DUCT AREA	

Comments: 50.9

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F] (LINE)	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	12	0					532.244								
W		5	NA	NA	1.0	2	534.9	71	72		347	198	51	6.5	
		10			1.0	2	537.6	75	74		351	203	52		
		15			1.0	2	540.4	76	75		347	204	52	6.7	
		20			1.0	3	543.1	77	75		350	216	54		
		25			1.0	3	546.2	78	75		347	217	56	6.8	
		30			1.0	3	548.758	78	77		354	220	55		
E		35			1.0	5	551.7	78	77		351	216	51	4.5	
		40			1.0	6	554.7	79	78		352	218	50		
		45			1.0	6	557.5	80	78		353	218	50	4.8	
		50			1.0	6	560.1	80	78		350	218	50		
		55			1.0	7	563.0	80	78		351	218	51	5.0	
		60			1.0	8	565.870	80	78		349	218	51		
AVERAGE					1.0		33.626	76.8						5.7	

Sample Train Leak Checks: Pre Test .003 ft^3 @ 12 in. Hg; Post Test .002 ft^3 @ 12 in. Hg

Pitot Tube Leak Checks: PreTest NA @ ____ in. H_2O; Post Test NA @ ____ in. H_2O

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TEST ID	RUN ONE	METER BOX	N5	CAL. DATA: delta H	1.819	Comments:	Constant Flow Rate
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001		
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA		
DATE	11/13/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA		
OPERATOR(S)	BJG	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	87	FILTER ID	1104	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.32	K FACTOR	NA	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	11:23	0					828.744								
WEST		5	NA	NA	1.0	2	831.6	86	83	—	360	200	64		
		10	NA	NA	1.0	2	834.2	85	81	—	350	210	55	7.9	
		15	NA	NA	1.0	2	836.8	84	75	—	349	217	58	7.7	7.8
		20	NA	NA	1.0	3	839.7	83	69	—	352	222	60		
		25	NA	NA	1.0	3	842.4	82	69	—	351	224	62	7.6	
		30	NA	NA	1.0	3	845.257	82	69	—	349	226	64		
							845.351								
EAST		35	NA	NA	1.0	4	848.6	78	66	—	353	222	65	6.7	
		40	NA	NA	1.0	4	851.3	80	71	—	348	226	61		
		45	NA	NA	1.0	4	853.8	82	76	—	350	227	61	6.8	6.7
		50	NA	NA	1.0	4	856.7	83	77	—	353	228	63		
		55	NA	NA	1.0	5	859.3	84	80		348	229	63	6.8	
	12:27	60	NA	NA	1.0	5	861.980	85	81		352	230	64	6.7	
AVERAGE					1.0	3.4	33.142	78.8						7.2	

Sample Train Leak Checks: Pre Test 0.001 ft^3 @ 15 in. Hg
Post Test 0.02 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

CONSOLENERGY

CTM-027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	RUN TWO	METER BOX	N 5	CAL. DATA: delta H	1.819
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA
DATE	11/14/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	79	FILTER ID	1105	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.29	K FACTOR	—	DUCT DIMENSIONS	DUCT AREA

Comments: Constant Flow Rate

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0117	0					862.618								
EAST		5	NA	NA	1.0	2	865.6	83	79	—	346	198	66	6.9	
		10	NA	NA	1.0	3	868.3	86	79	—	350	212	66	6.8	
		15	NA	NA	1.0	3	870.1	86	79	—	355	214	66		6.95
		20	NA	NA	1.0	3	873.9	87	79		353	218	66		
		25	NA	NA	1.0	4	876.7	87	80		350	226	65	7.0	
		30	NA	NA	1.0	4	879.386	87	80		353	229	64	7.1	
				Leak Check: 0.000 ft^3 @ 10^4 Hg											
							879.472								
WEST		35	NA	NA	1.0	4	882.3	86	79	—	355	216	57		
		40	NA	NA	1.0	4	885.2	87	80	—	351	218	55	8.2	
		45	NA	NA	1.0	5	887.8	87	79	—	350	220	57		
		50	NA	NA	1.0	5	890.5	87	79	—	353	220	58	8.3	8.27
		55	NA	NA	1.0	5	893.2	87	79	—	353	220	60		
		60	NA	NA	1.0	5	896.215	88	80	—	350	220	60	8.3	
AVERAGE					1.0	3.4	33.511	82.9						7.6	

Sample Train Leak Checks: Pre Test 0.006 ft^3 @ 12 in. Hg; Post Test 0.038 ft^3 @ 5 in. Hg ← Leak identified - was in probe No correction needed

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	RUN THREE	METER BOX	N5	CAL. DATA: delta H	1.819
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA
DATE	11/14/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	83	FILTER ID	~~1.819~~	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.29	K FACTOR	1.06	DUCT DIMENSIONS / DUCT AREA	

Comments: Constant Flow Rate
Slow leak developed in 1st ~~[illegible]~~ port when teflon connections heated up.

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING ~~899.[ft³].307~~	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0356	0					~~897.147~~								
WEST		5	NA	NA	1.0	2	902.2	84	80	—	347	197	59		
		10	NA	NA	1.0	2	905.1	87	80	—	347	195	58	9.2	
		15	NA	NA	1.0	2	908.0	86	80	—	348	196	60		
		20	NA	NA	1.0	2	910.8	87	80	—	352	196	60	8.6	
		25	NA	NA	1.0	2	913.7	87	80	—	354	202	57		
		30	NA	NA	1.0	2	916.475	88	80	—	354	204	58	8.6	
	0450						919.955								
		35	NA	NA	1.0	3.5	922.8	86	81	—	286	198	58	6.7	
		40	NA	NA	1.0	5	926.4	89	81	—	347	209	55	-	
		45	NA	NA	1.0	5	928.3	89	81	-	351	211	57		
		50	NA	NA	1.0	5	931.0	89	81	-	352	211	57	6.7	
		55	NA	NA	1.0	6	933.8	89	80	—	348	212	56		
		60	NA	NA	1.0	6	936.440	89	80	—	351	213	56	6.6	
AVERAGE					1.0	3.5	33.653	83.9						7.7	

Sample Train Leak Checks: Pre Test 0.000 ft³ @ 8 in. Hg; Post Test 0.026 ft³ @ 6 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	RUN 4	METER BOX	N5	CAL. DATA: delta H	1.819	Comments:	Constant Flow Rate
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001		431
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA		
DATE	11/14/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA		
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	90	FILTER ID	1107	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.06	K FACTOR	—	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ LINE [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	11:11	0					936.744								
EAST		5	NA	NA	1.0	2	939.6	90	89	—	347	188	58		
		10	NA	NA	1.0	2	942.5	90	88	—	350	197	55	4.7	
		15	NA	NA	1.0	2	945.3	92	88	—	348	204	57		
		20	NA	NA	1.0	2	947.985	92	88	—	349	208	60	4.9	
		~~25~~	NA	NA	1.0										
		~~30~~	NA	NA	1.0										
WEST		25 ~~35~~	NA	NA	1.0	2	950.8	92	87	—	350	209	64	5.1	
		30 ~~40~~	NA	NA	1.0	2	953.4	93	88	—	348	213	63		
		35 ~~45~~	NA	NA	1.0	3	956.2	93	87	—	352	216	63	5.1	
		40 ~~50~~	NA	NA	1.0	5	959.100	94	87	—	352	217	61		
		~~55~~	NA	NA	1.0										
		~~60~~	NA	NA	1.0										
AVERAGE					1.0		22.356	89.9			349.5	206.5		4.95	

Sample Train Leak Checks: Pre Test .002 ft^3 @ 10 in. Hg
Post Test .000 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

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TEST ID	RUN 5	METER BOX	N-5	CAL. DATA: delta H	1.819
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA
DATE	11/15/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	90	FILTER ID	1108	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.06	K FACTOR	—	DUCT DIMENSIONS / DUCT AREA	

Comments: Constant Flow Rate

~~47.0~~

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ Line [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1252	0					961.250								
WEST		5	NA	NA	1.0	2	964.2	90	85	—	350	204	65	5.6	
		10	NA	NA	1.0	2	967.0	93	85	—	349	204	55		
		15	NA	NA	1.0	3	~~968.5~~	94	85	—	351	206	54	5.5	
		20	NA	NA	1.0	4	972.599	95	85	—	353	210	55		
		~~25~~	~~NA~~	~~NA~~	~~1.0~~										
		~~30~~	~~NA~~	~~NA~~	~~1.0~~										
EAST		~~25~~ 35	NA	NA	1.0	5	975.4	93	85	—	355	203	54	4.6	
		~~30~~ 40	NA	NA	1.0	6	978.1	93	85	—	355	204	54		
		~~35~~ 45	NA	NA	1.0	7	981.0	94	85	—	350	206	55	4.4	
	0135	~~40~~ 50	NA	NA	1.0	8	983.612	95	85	—	347	208	55		
		~~55~~	~~NA~~	~~NA~~	~~1.0~~										
		~~60~~	~~NA~~	~~NA~~	~~1.0~~										
AVERAGE					1.0		22.362	89.2			351.3	205.6		5.03	

DGM - 969.8

Sample Train Leak Checks: Pre Test .006 ft^3 @ 10 in. Hg
Post Test 0.000 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

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TEST ID	RUN 6	METER BOX	N-5	CAL. DATA: delta H	1.819	Comments: Constant Flow Rate	
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001		53.5
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA		
DATE	11/15/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA		
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	90	FILTER ID	1109	DUCT X-SECTION	circ ?	rect ? / other:	
BAR. PRESS. [" Hg]	29.03	K FACTOR	—	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	LINE ~~FILTER BOX~~ [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0347	0					984.113								
EAST		5	NA	NA	~~1.0~~ 1.5	3	987.7	89	84	—	348	204	60		
		10	NA	NA	~~1.0~~ 1.5	3	991.0	89	84	—	347	214	55	5.2	
		15	NA	NA	~~1.0~~ 1.5	4	994.3	90	84	—	354	216	55		
		20	NA	NA	~~1.0~~ 1.5	4	997.806	90	85	—	354	217	56	5.3	
		~~25~~	~~NA~~	~~NA~~	~~1.0~~										
		~~30~~	~~NA~~	~~NA~~	~~1.0~~										
WEST		~~25~~ 35	NA	NA	~~1.0~~ 1.5	5	1001.2	91	84	—	348	228	60		
		~~30~~ 40	NA	NA	~~1.0~~ 1.5	7	1004.5	92	84	—	352	239	62	6.3	
		~~35~~ 45	NA	NA	~~1.0~~ 1.5	7	1007.8	92	84	—	351	240	63		
		~~40~~ 50	NA	NA	~~1.0~~ 1.5	8	1011.073	93	84	—	351	242	64	6.5	
		~~55~~	~~NA~~	~~NA~~	~~1.0~~										
		~~60~~	~~NA~~	~~NA~~	~~1.0~~										
AVERAGE					~~1.0~~ 1.5		26.960	87.4			350.6	225.0	59.4	5.83	

Sample Train Leak Checks: Pre Test .004 ft^3 @ 12 in. Hg; Post Test 0.000 ft^3 @ 12 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

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TEST ID	RUN 7	METER BOX	N-5	CAL. DATA: delta H	1.819	Comments:	Constant Flow Rate
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001		
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA		50.0
DATE	11/15/07	NOZZLE ID [inch]	0.275	FILTER BOX SETTING	NA		
OPERATOR(S)	BWG	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	90	FILTER ID	1110	DUCT X-SECTION	circ ?	rect ? / other:	
BAR. PRESS. [" Hg]	29.06	K FACTOR	—	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] Inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER ~~BOX~~ LINE [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0502	0					12.553								
WEST		5	NA	NA	1.0 1.5	3	16.0	90	83	—	346	193	63	5.8	
		10	NA	NA	1.0	3	19.3	91	82	—	348	187	59		
		15	NA	NA	1.0	4	22.8	92	83	—	349	191	56	5.8	
		20	NA	NA	1.0	5	26.116	93	82	—	351	205	55		
		~~25~~	~~NA~~	~~NA~~	~~1.0~~										
		~~30~~	~~NA~~	~~NA~~	~~1.0~~										
EAST		25 ~~35~~	NA	NA	1.0 1.5	5	29.5	92	81	—	350	204	55		
		30 ~~40~~	NA	NA	1.0	5	32.9	93	80	—	353	207	54	4.9	
		35 ~~45~~	NA	NA	1.0	7	36.3	93	80	—	350	210	54		
		40 ~~50~~	NA	NA	1.0	7	39.651	93	79		348	211	55	4.7	
		~~55~~	~~NA~~	~~NA~~	~~1.0~~										
		~~60~~	~~NA~~	~~NA~~	~~1.0~~										
AVERAGE					1.5 1.0		27.098	86.7			349.4	201.0		5.30	

Sample Train Leak Checks: Pre Test .002 ft^3 @ 15 in. Hg
Post Test .002 ft^3 @ 15 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

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TEST ID	NH3-8
PLANT	Greenidge
LOCATION	Air Heater Inlet
DATE	11-16-07
OPERATOR(S)	JL DC
AMBIENT TEMP [°F]	
BAR. PRESS. [" Hg]	29.21

METER BOX	N-5
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3
NOZZLE ID [inch]	.276
%H_2O (Assumed)	8
FILTER ID	1113
K FACTOR	—

CAL. DATA: delta H	1.819		
Y	1.001		
C(p)	NA		
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments: Constant Flow Rate
40 minute test

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1240	0					40.340								
E		5	NA	NA	1.0 65	3.5	43.640	66	66	NA	348	NA	68	5.1	15.0
		10	NA	NA	1.0	3.5	46.880	69	66		350		68	5.0	15.0
		15	NA	NA	1.0	4.0	50.02	70	65		352		67	5.1	15.0
	1300	20	NA	NA	1.0	5.0	53.221	71	65		351		66	5.3	14.8
		25	NA	NA	1.0										
		30	NA	NA	1.0										
	1306														
W		35 25	NA	NA	1.0	5.5	66.55	71	68		351		67		
		40 30	NA	NA	1.0	7.5	59.483	74	68		348		68	6.6	13.6
		45 35	NA	NA	1.0	8.0	62.724	75	70		353		68	7.0	13.2
	1326	50 40	NA	NA	1.0	8.5	65.978	76	69		348		67	7.0	13.2
		55	NA	NA	1.0										
		60	NA	NA	1.0										
					1.5										
AVERAGE					1.0		25.638	69.3						5.9	14.3

Sample Train Leak Checks: Pre Test 0 ft^3 @ 10 in. Hg
Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest NA @ _____ in. H_2O
Post Test _____ @ _____ in. H_2O

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TEST ID	pit 3-9
PLANT	Greenidge
LOCATION	Air Heater Inlet
DATE	11-16-07
OPERATOR(S)	JL DC
AMBIENT TEMP [°F]	
BAR. PRESS. [" Hg]	

METER BOX	N-5
PITOT TUBE DESC	NA
PROBE LENGTH [ft]	3
NOZZLE ID [inch]	0.276
%H_2O (Assumed)	8
FILTER ID	1112
K FACTOR	—

CAL. DATA: delta H	1.819
Y	1.001
C(p)	NA
FILTER BOX SETTING	NA
PROBE HTR SETTING	325
DUCT X-SECTION	circ ? rect ? other:
DUCT DIMENSIONS	DUCT AREA

Comments: Constant Flow Rate

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1432	0					68.600								
W		5	NA	NA	1.0 1.5	3.5	71.908	72	69	NA	354	NA	55	5.5	14.6
		10	NA	NA	1.0	4.0	75.19	74	69		348		49	5.1	15.0
		15	NA	NA	1.0	5.0	78.450	77	69		353		50	5.3	14.8
	1437	20	NA	NA	1.0	5.0	81.708	78	70		353		52	5.5	14.6
		25	NA	NA	1.0										
		30	NA	NA	1.0										
	1437														
E		25 35	NA	NA	1.0 1.5	6.5	84.905	75	71		351		59	4.5	15.6
		30 40	NA	NA	1.0	7.0	88.114	77	71		354		51	4.5	15.6
		35 45	NA	NA	1.0	8.0	91.300	78	71		350		51	4.7	15.4
	1457	40 50	NA	NA	1.0	9.0	94.519	79	70		349		54	4.7	15.4
		55	NA	NA	1.0										
		60	NA	NA	1.0										
					1.5										
AVERAGE					1.0		25.919	73.1						5.0	15.1

Sample Train Leak Checks: Pre Test 0 ft^3 @ 15 in. Hg; Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest NA @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOL ENERGY

CTM-027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	NH3-15	METER BOX	N-5	CAL. DATA: delta H	1.819	Comments:	Constant Flow Rate
PLANT	Greenidge	PITOT TUBE DESC	NA	Y	1.001		
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	NA		
DATE	11-16-07	NOZZLE ID [inch]	0.276	FILTER BOX SETTING	NA		
OPERATOR(S)	JL-DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]		FILTER ID	1111	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.23	K FACTOR	—	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-probe]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	16:42	0					94.900								
E		5	NA	NA	1.0 1.0	3.0	98.125	74	72	NA	346	NA	68	4.7	15.4
		10	NA	NA	1.0	3.5	101.400	75	72		347		52	4.9	15.2
		15	NA	NA	1.0	4.0	104.636	76	72		355		52	5.1	15.0
		20	NA	NA	1.0	5.0	107.833	78	73		350		54	5.4	14.7
		25	NA	NA	1.0										
		30	NA	NA	1.0										
	17:06:40														
W		35	NA	NA	1.0 1.5	5.0	—	77	73		355		60		
		40	NA	NA	1.0	5.5	114.318	78	73		354		55		
		45	NA	NA	1.0	6.0	—	80	74		354		56	7.5	
	17:26	50	NA	NA	1.0	7.0	120.902	80	72		351		58	8.0	
		55	NA	NA	1.0										
		60	NA	NA	1.0										
					1.5										
AVERAGE					1.0		26.002	74.7						5.9	15.1

Sample Train Leak Checks: Pre Test 0.00 ft^3 @ 20 in. Hg; Post Test 0.00 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	3to/08 All 1	METER BOX	Rental	CAL. DATA: delta H	1.842	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC		Y	0.990		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]		C(p)			
DATE	3/10/03	NOZZLE ID [inch]	3/32 B-0.25	FILTER BOX SETTING	NA		
OPERATOR(S)	SWR	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	79°F	FILTER ID		DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.74	K FACTOR	CSR	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ HL [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	14:40	0					921.505								
	14:45	5			1.0	3.0	924.30	76	77		325	191	57	6.0	
	14:50	10				3.0	927.08	77	77		326	191	53		
	14:55	15				3.0	929.89	77	77		325	191	54	4.6	15.6
	15:00	20				3.0	932.68	79	77		324	190	57	4.1	15.9
	15:05	25				3.0	935.54	79	77		325	189	59	3.9	16.1
	15:10	30				3.0	938.38	81	78		325	190	59	4.0	16.0
						Stop									
	15:20					start→	939.33	80	79		326	201	57		
	15:25	35				3.0	942.58	80	79		326	201	57		
	15:30	40				3.0	945.45	81	80		324	202	55		
	15:35	45				3.0	948.30	83	80		325	202	56	6.0	14.3
	15:40	50				3.0	951.17	83	80		325	202	57	5.9	14.2
	15:45	55				3.0	954.05	84	80		325	202	57	5.8	14.3
	15:50	60				3.0	957.01	84	80		325	202	56		
AVERAGE					1.0		34.275	79.4			325	196.1	56.2	5.0	

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 7 in. Hg; Post Test <0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest ___ @ ___ in. H_2O; Post Test ___ @ ___ in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	A.H.I Test 2	METER BOX	809150	CAL. DATA: delta H	1.842	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC		Y	0.990		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]		C(p)			
DATE	3/13/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	L.W.R	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	76	FILTER ID	1172	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.38	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX H/L [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	09:00	0					240.60								
	09:05	5			1.00"	5.00	243.41	79	80		326	230	51	6.2	14.0
	09:10	10			"	5.0	246.24	79	80		325	230	49	6.0	14.1
	09:15	15			"	5.5	249.09	80	80		325	230	51	6.0	14.1
	09:20	20			"	6.0	251.87	80	80		325	230	55	5.9	14.2
	09:25	25			"	6.5	254.67	81	80		325	230	58	5.8	14.3
	09:30	30			"	7.0	257.49	81	80		325	230	62	6.3	13.9
						New start →	258.02								
	09:40	35			1.00"	8.0	260.88	82	81		326	230	60	4.8	15.3
	09:45	40			"	8.5	263.68	83	81		325	230	63	4.5	15.6
	09:50	45			"	9.5	266.49	84	81		325	230	66	4.4	15.7
	09:55	50			"	10.0	269.31	85	82		325	230	66	4.5	15.6
	10:00	55			"	10.5	272.12	85	82		325	230	66	4.5	15.6
	10:05	60			"	11.0	274.92	85	82		325	230	66	4.5	15.6
AVERAGE					1.00		33.79	81.4			325.2			5.3	14.3

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 7 in. Hg
Post Test <0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O
Post Test _____ @ _____ in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	AHI Test 3	METER BOX	80950	CAL. DATA: delta H	1.842	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC		Y	0.990		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]		C(p)			
DATE	3/13/18	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	PR	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	93	FILTER ID	1177	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.29	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX HL [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	11:50	0					275.25								
	11:55	5			1.0"	5.0	278.15	82	82	~~37~~	329	230	54	5.6	14.6
	12:00	10			"	5.0	281.06	82	83		325	230	54	4.5	15.6
	12:05	15			"	5.5	283.93	83	83		325	230	56	4.6	15.5
	12:10	20			"	6.0	286.77	84	83		325	230	58	4.6	15.5
	12:15	25			"	6.5	289.63	85	83		325	230	61	4.7	15.4
	12:20	30			"	6.5	292.48	85	83		325	230	64	4.6	15.5
							292.58								
	12:30	35			1.0"	7.0	295.42	86	84		326	230	56	6.5	13.6
	12:35	40			"	7.0	298.26	86	84		325	230	53	6.4	13.7
	12:40	45			"	8.0	301.10	87	84		324	230	53	6.5	13.6
	12:45	50			"	8.5	303.95	87	85		325	230	53	6.5	13.6
	12:50	55			"	9.0	306.80	88	85		325	230	54	6.4	13.7
	12:55	60			"	9.5	309.66	88	85		325	230	54	6.4	13.7
AVERAGE					1.00		34.31	84.5			325.3			5.6	14.5

Sample Train Leak Checks: Pre Test 50.61 ft^3 @ 7 in. Hg
Post Test 50.61 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O
Post Test ____ @ ____ in. H_2O

CONSOLENERGY

EPA CTM 027 AMMONIA SAMPLING FIELD DATA SHEET

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TEST ID	AHI Test 4	METER BOX	80950	CAL. DATA: delta H	1.842	Comments:	
PLANT	GREENIDGE	PITOT TUBE DESC		Y	0.990		
LOCATION	AIR HEATER INLET	PROBE LENGTH [ft]		C(p)			
DATE	3/13/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	L.W.R	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	91	FILTER ID	1182	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]		K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	14:20	0					310.05								
	14:25	5			1.00"	5.00	312.95	85	87		325	~~325~~ 230	48	6.7	13.5
	14:30	10			"	5.5	315.80	86	87		324	~~325~~	46	6.6	13.6
	14:35	15			"	6.0	318.64	87	86		326	~~320~~	49	6.8	13.4
	14:40	20			"	6.5	321.45	88	87		325	~~320~~	53	6.5	13.7
	14:45	25			"	7.0	324.30	89	87		326	~~2~~ ↓	55	6.6	13.6
	14:50	30			"	7.5	327.21	89	87		325	230	56	6.8	13.4
						NEW START	327.27	~~90~~	~~85~~						
	15:00	35			1.00	8.0	330.18	90	88		327	231	54	4.7	15.4
	15:05	40			"	8.5	333.02	90	88		325	230	53	4.6	15.5
	15:10	45			"	9.0	335.86	92	89		325	230	55	4.6	15.5
	15:15	50			"	9.0	338.66	92	89		325	230	56	5.5	14.7
	15:20	55			"	9.5	341.70	93	90		325	230	55	5.5	14.7
	15:25	60			"	10.0	344.59	94	90		325	230	56	5.4	14.8
AVERAGE					1.00		34.48	88.8			325.3			5.9	14.3

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 7 in. Hg
Post Test <0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O
Post Test _____ @ _____ in. H_2O

CONSOL ENERGY

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CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	NH3 - 1	METER BOX	2	CAL. DATA: delta H	1.779
PLANT	AES Greenidge	PITOT TUBE DESC	[illegible]	Y	0.988
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	
DATE	5/20/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	Rio, DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1193	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	28.88	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ sample line (3) [°F]	LAST IMP TEMP [°F] (5)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1113pm	0					1022.70								
	1118	5			1.00	3.5	25.58	90	91		324	204	64	4.5	15.5
Right	1123	10			|	4	28.40	91	91		331	207	63	4.5	15.5
	1128	15			|	4	31.26	93	91		324	208	63	4.3	15.7
	1133	20			↓	4.5	34.11	94	91		329	209	64	4.5	15.5
	1140						34.30	0		leak	test	ok @	9"	Hg	
	1145	25			1.00	5	37.34	94	92		328	192	62	~~[illegible]~~	~~[illegible]~~
	1156 1201	30			|	5	39.60 42.57	94	93		323	190	63	5.3	14.8
	1206	35			|	5.5	45.36	94	93		324	191	62	5.3	14.8
	1211	40			↓	6	48.16	95	93		322	191	63	5.4	14.7
AVERAGE		40			1.00		23.01	92.5						4.8	15.2

Sample Train Pre Test <0.01 ft^3 @ 9 in. Hg

Leak Checks: Post Test ____ ft^3 @ ____ in. Hg

Pitot Tube PreTest ____ @ ____ in. H_2O

Leak Checks: Post Test ____ @ ____ in. H_2O

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NOTE: Purge for 10 minutes at end of sampling.

1145 - leak in probe. Fixed & restart @ 1156

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI NH_3-2	METER BOX	2	CAL. DATA: delta H	1.779	Comments:	
PLANT	AES Greenidge	PITOT TUBE DESC		Y	0.988		
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)			
DATE	5/21/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	RLO-DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]		FILTER ID	1194	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	28.85	K FACTOR		DUCT DIMENSIONS	(6) (4)	DUCT AREA	(2)

(3) samples

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1 am	0					48.60								
	1:05 am	5			1.00	3	51.50	91	91		327	166	62	5.8	14.4
Leak	1:10 am	10				3.5	54.32	92	92		325	172	59	5.8	14.4
	1:15 am	15				4	57.22	93	92		323	180	61	5.8	14.4
	1:20 am	20				4.5	60.13	94	92		323	186	64	—	—
	1:25 am						60.30				leak	test	<0.01	@ 8"	Hg
	1:30 am	25			1.00	5	63.18	93	92		333	185	64	5.6	14.6
Right	1:35 am	30				5	65.97	94	92		335	186	66		
	1:40 am	35				5	68.85	94	93		328	187	65		
	1:45 am	40				5	71.72	95	93		329	187	66	8.2	
							—	leak ≈		0.10 cfm					
							—	O_2 meter lowered to			AH 0	@ 1:30	am		
AVERAGE		40			1.00		22.45	92.7						6.2	14.5

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 9 in. Hg; Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI-NH_3-3	METER BOX	2	CAL. DATA: delta H	1.779
PLANT	AES Greenidge	PITOT TUBE DESC		Y	0.988
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	5/21/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	RWO	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1195	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	28.88	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ (3) sample line	LAST IMP TEMP [°F] (5)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	3:28am	0					72.70								
	3:33am	5			1.00	3	75.65	91	91		320	231	57	5.3	14.8
Right	3:38am	10				3.5	78.54	92	92		331	229	54	5.5	14.6
	3:43am	15				4	81.42	93	92		331	229	56	~~5.5~~ 5.5	14.6
	3:48am	20				4.5	84.32	94	92		327	230	62	5.5	14.6
	3:56am						84.70				leak test <0.02 @ 9" Hg				
	4:01	25			1.00	4.5	87.63	93	92		321	209	61	6.5	13.7
Left	4:06	30				5	90.50	94	92		336	207	61	5.8	14.3
	4:11	35				5.5	93.34	94	92		324	207	63	5.9	14.2
	4:16	40				6	96.15	95	92		326	207	66	5.8	14.3
AVERAGE					1.00		23.07	92.6						5.7	14.4

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 9 in. Hg; Post Test ____ ft^3 @ ____ in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

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NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI - NH_3 - 4	METER BOX	NC4	CAL. DATA: delta H	1.744
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	5/21/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	RW, DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1194	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	28.88	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	4:53am	0					578.30								
	4:58am	5			1.00	5.5	581.39	96	97		331	266	59	6.3	13.9
	5:03am	10				6	584.25	97	97		321	268	57	6.2	14.0
	5:08am	15				6.5	587.15	98	97		330	269	57	6.1	14.1
	5:13am	20				7	590.00	100	98		325	271	58	6.1	14.1
	5:25am						592.10			leak test		<0.01 @ 9" Hg			
	5:30am	25			1.00	7	595.22	100	98		332	256	60	7.9	12.3
	5:35am	30				7.5	598.15	102	99		324	254	58	8.0	12.2
	5:40am	35				7.5	601.13	102	99		322	254	60	8.4	11.8
	5:45am	40				8	604.08	102	99		323	254	60	8.5	11.7
AVERAGE					1.00		23.58	98.8						7.2	13.0

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 9 in. Hg; Post Test 0.20 ft^3 @ 8 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOL ENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI-NH3-5	METER BOX	2	CAL. DATA: delta H	1.779
PLANT	AES Greenidge	PITOT TUBE DESC		Y	0.985
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	5/21/03	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	DJO, AG	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1210	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]		K FACTOR		DUCT DIMENSIONS / DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	FILTER BOX [°F] (3)	LAST IMP TEMP [°F] (5)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	7:08	0					98.10								
	7:13	5			1.00	3.5	100.000	87	87		333	195	59	3.8	16.2
	7:18	10				4.0	103.775	88	88		321	195	58	3.5	16.5
	7:23	15				5.0	106.620	90	88		335	197	59	3.8	16.3
	7:28	20				5.7	109.436	90	88		324	197	62	3.8	16.2
	7:33						109.517				Leak	Test <	0.01	@ 10"	Hg
	7:38	25			1.00	6.0	112.335	90	88		335	193	61	3.9	14.2
	7:43	30				7.0	115.135	92	89		328	192	61	3.7	14.5
	7:48	35				7.7	117.995	92	90		327	190	64	3.6	14.6
	7:53	40				8.0	120.843	93	90		335	189	65	3.6	14.5
	End 07:53														
AVERAGE					1.00		22.662	89.4						4.7	15.4

Sample Train Leak Checks: Pre Test 20.01 ft^3 @ 10 in. Hg; Post Test 20.01 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI NH3-6	METER BOX	NE-4	CAL. DATA: delta H	1.744
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]		C(p)	
DATE	5/21/03	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	AG / RO	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1211	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	28.88	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP (6) [oF] inlet	METER TEMP (7) [oF] outlet	STACK TEMP [°F]	PROBE TEMP (2) [°F]	FILTER (3) BOX [°F]	LAST IMP (5) TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	801	0					604.90								
	806	5			1.0	4.0	607.650	95	96		311	231	60	3.6	16.4
	811	10				4.1	610.540	96	96		325	233	57	4.3	15.7
	816	15				4.9	613.415	97	96		325	240	60	5.0	15.0
	821	20				5.1	616.291	99	97		316	243	64	4.9	15.1
	pause 821														
	Restart 825					6	616.400	100	99		323	232	60		
	841	25				6.0	620.610							5.7	14.4
	846	30				6.1	623.510	102	99		325	232	58	6.7	13.4
	851	35				6.5	626.415	102	100		325	232	60	7.1	13.0
	856	40				7.0	629.316	103	100		325	232	61	7.5	12.7
	End 856														
AVERAGE					1.00		23.006	98.6						4.5	14.5

Sample Train Pre Test <0.02 ft^3 @ 10 in. Hg
Leak Checks: Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube PreTest _____ @ _____ in. H_2O
Leak Checks: Post Test _____ @ _____ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

Pause 8:27 to deck for leak @ 617.644
Restart 8:39 618.945

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	NH3-7	METER BOX	V-2	CAL. DATA: delta H		Comments:	
PLANT	AES Greenidge	PITOT TUBE DESC		Y			
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)			
DATE	5/21	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	AJH	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]		FILTER ID	1210	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	28.88	K FACTOR	—	DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	0912	0					123.199								
	0917	5			1.0	8.0	125.010	90	91		326	192	66	4.2	15.8
	0922	10				9.0	128.865	90	91		321	193	64	4.2	15.8
	0927	15				10.0	131.670	91	91		329	194	65	4.5	15.5
	0932	20				11.0	134.505	93	91		324	194	64	4.5	15.5
						leak check	<0.01	@ 13"							
	Start: 0937						134.704								
	0942	25			1.0	13.0	137.560	91	91		329	196	65	5.6	14.5
	0947	30				13.0	140.390	92	91		333	195	63	6.2	14.0
	0952	35				14.0	143.145	92	91		327	195	64	5.9	14.2
	0957	40				14.5	145.875	92	91		331	195	65	5.7	14.4
	End 0957														
AVERAGE					1.00		22.477	91.2						5.1	15.0

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 10 in. Hg; Post Test <0.01 ft^3 @ 16 in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

Page ____ of ____

TEST ID	AHI - NH_3 - 8	METER BOX	2	CAL. DATA: delta H	1.779
PLANT	AES Greenidge	PITOT TUBE DESC		Y	0.985
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	5/22/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	KW - DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1213	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	28.94	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft³]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	~~FILTER BOX~~ heated line (3) [°F]	LAST IMP TEMP [°F] (5)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1:03 am	0					150.40								
	1:08 am	5			1.00	3	153.29	82	83		318	193	53	7.1	13.1
Right	1:13 am	10				3.5	156.16	83	83		330	195	50	7.1	13.1
	1:18 am	15				4	159.07	83	83		331	197	52	7.2	13.0
	1:23 am	20				4	161.95	84	83		330	199	55	7.0	13.2
	1:29 am	0					162.10	→ leak ck 60.02 @ 8" Hg							
	1:32 am	3.2			1.00		164.015	stopped to ck for leaks, hi O_2 ≈ 10%							
Left	1:41 1:43	5				4	165.60 166.66	85	84		330	199	58	7.7	12.5
	1:48	10				4.5	169.53	85	84		322	198	56	7.6	12.6
	1:53	15				5	172.39	86	84		335	197	58	7.5	12.7
	1:58	20				5.5	175.28	87	85		334	197	61	7.4	12.8
AVERAGE					1.00		23.145	84.0						7.3	12.9

Sample Train Leak Checks: Pre Test <0.01 ft³ @ 10 in. Hg; Post Test <0.01 ft³ @ 10 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOL ENERGY.

NOTE: Purge for 10 minutes at end of sampling.

stop @ 3.2 min, left port 164.015 due to hi O_2 ~10%

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

Left Right
wall

Page ____ of ____

TEST ID	AHI-NH_3-9	METER BOX	NC-4	CAL. DATA: delta H	1.744
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	5/22/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	RW, DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1214	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	28.94	K FACTOR		DUCT DIMENSIONS / DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	FILTER BOX ~~[°F]~~ heated line (3)	LAST IMP TEMP [°F] (5)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	2:07	0					632.60								
	2:12	5			1.00	3	635.47	89	90		309	249	55	7.5	12.7
Left	2:17	10				3.5	638.36	91	90		310	244	54	7.4	12.8
	2:22	15				3.5	641.29	91	90		321	247	58	7.5	12.7
	2:27	20				4	644.24	92	91		325	253	59	7.6	12.6
	2:38						645.95				leak test	<0.01	@ 10"	Hg	
Left	2:43	25			1.00	4	648.89	93	92		325	235	57	7.8	12.4
	2:48	30				4.5	651.80	95	92		325	234	58	7.8	12.4
	2:53	35				5	654.78	96	93		325	234	59	7.6	12.6
	2:58	40				5	657.74	97	93		324	235	60	7.8	12.4
AVERAGE					1.00		25.14	92.2						7.6	12.6

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 9 in. Hg; Post Test _____ ft^3 @ _____ in. Hg

Pitot Tube Leak Checks: PreTest _____ @ _____ in. H_2O; Post Test _____ @ _____ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	AHI-NH_3-11	METER BOX	2	CAL. DATA: delta H	1.779
PLANT	AES Greenidge	PITOT TUBE DESC		Y	0.985
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3	C(p)	
DATE	5/22/08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	RW, DC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]		FILTER ID	1215	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	28.97	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	4:58	0					191.10								
		3			1.00		192.80		hi O_2, another leak test						
Right	5:07 / 5:09	5				3.5	193.633	83	83		281	188	59	7.4	12.7
	5:14	10				3.5	197.82	84	84		299	189	56	7.3	12.8
	5:19	15				4	200.67	86	84		324	193	59	7.3	~~[illegible]~~ 12.[illegible]
	5:24	20				4	203.57	86	84		324	196	61	7.4	12.7
	5:35						204.523								
	5:40	25			1.00	4.5	207.47	85	85		318	215	62	7.9	12.4
	5:45	30				4.5	210.34	86	85		324	217	59	7.9	12.4
	5:50	35				5	213.19	87	85		325	219	62	8.0	12.3
	5:55	40				5.5	216.10	88	85		325	220	64	8.0	12.3
AVERAGE					1.00		23.214	85.0						7.7	12.6

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 10 in. Hg; Post Test 0.03 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest ____ @ ____ in. H_2O; Post Test ____ @ ____ in. H_2O

CONSOL ENERGY.

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

1.0

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TEST ID	NH_3 - 1
PLANT	AES Greenidge
LOCATION	Air Heater Inlet
DATE	6-12-08
OPERATOR(S)	KRC
AMBIENT TEMP [°F]	79
BAR. PRESS. [" Hg]	29.59

METER BOX	N4
PITOT TUBE DESC	
PROBE LENGTH [ft]	3'
NOZZLE ID [inch]	
%H_2O (Assumed)	8
FILTER ID	1229
K FACTOR	

CAL. DATA: delta H			
Y			
C(p)			
FILTER BOX SETTING	NA		
PROBE HTR SETTING	325		
DUCT X-SECTION	circ ?	rect ?	other:
DUCT DIMENSIONS		DUCT AREA	

Comments: _____

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] (6) inlet	METER TEMP [oF] (7) outlet	STACK TEMP [°F]	PROBE TEMP [°F] (2)	FILTER BOX [°F] (3)	LAST IMP TEMP [°F] (4)	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
		0					685.500								
	10:10	5				3	687.90	78	78		325	243	66	5.2	14.8
		10				4	690.62	78	78		325	239	59	5.4	14.7
		15				4	693.39	80	79		325	238	58	5.4	14.7
		20				5	696.13	81	79		325	238	61	5.4	14.7
		25				5	698.92	81	80		326	238	65	5.4	14.7
		30				5	701.67	82	80		325	238	63	5.9	15.2
		35				5	704.43	82	80		324	241	63	4.1	15.9
		40				5	707.30	83	81		325	243	57	4.1	15.9
		45				6	710.00	84	81		325	243	58	4.5	15.6
		50				6	712.70	84	81		325	243	58	4.5	15.6
		55				7	715.47	85	82		325	244	60	4.5	15.6
	11:15	60				7	718.179	86	83		325	244	60	4.5	15.6
AVERAGE							32.679	81.1			325.0	241.0	60.7	4.83	

Sample Train Leak Checks: Pre Test <.001 ft^3 @ 7 in. Hg
Post Test <.001 ft^3 @ 10 in. Hg

Pitot Tube Leak Checks: PreTest ___ @ ___ in. H_2O
Post Test ___ @ ___ in. H_2O

NOTE: Purge for 10 minutes at end of sampling.

CONSOLENERGY.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	NH_3-2	METER BOX	NH	CAL. DATA: delta H	
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	6-12-08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	KRC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	82	Same AS First Test 1229 FILTER ID	~~[illegible]~~	DUCT X-SECTION	circ ? rect ? other:
BAR. PRESS. [" Hg]	29.65	K FACTOR		DUCT DIMENSIONS	DUCT AREA

Comments:

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	FILTER BOX [°F] H. L.	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	1355	0					719.000								
		5				6	721.82	85	85		322	257	60	5.0	15.0
		10				7	724.65	85	85		325	248	57	—	—
		15				7	727.41	86	86		325	249	56	5.5	14.6
		20				8	730.26	87	86		325	252	59	—	—
		25				9	733.01	89	86		325	254	60	5.7	14.4
	1425	30				10	735.80	89	87		325	256	60	—	—
														Ave=5.40	
		35			Leak	10	738.68	89	87		324	255	60	5.8	14.3
		40				10	~~741.65~~ 744.10	89	87		325	252	59	—	—
		45				4	747.10	90	88		327	252	60	5.6	14.4
		50				4	749.88	90	88		325	250	60	5.6	14.4
		55				4	752.70	90	89		325	251	60	5.3	14.8
	1510	60				4	755.71	91	89		325	251	60	5.3	14.8
							33.760							Ave=5.5	
AVERAGE							~~34.240~~	PC	87.6		324.8	252.3	59.1	5.46	

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 6 in. Hg; Post Test <0.01 ft^3 @ 7 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O; Post Test — @ — in. H_2O

NOTE: Purge for 10 minutes at end of sampling.

CONSOL ENERGY

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

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TEST ID	HI NH3-3	METER BOX	N-4	CAL. DATA: delta H	
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	3'	C(p)	
DATE	6-13-08	NOZZLE ID [inch]		FILTER BOX SETTING	NA
OPERATOR(S)	KRC	%H_2O (Assumed)	8	PROBE HTR SETTING	325
AMBIENT TEMP [°F]	90°	FILTER ID	1232	DUCT X-SECTION	circ ? / rect ? / other:
BAR. PRESS. [" Hg]	29.65	K FACTOR		DUCT DIMENSIONS / DUCT AREA	

Comments: 64.7

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER~~ BOX [°F]	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	10:30	0					756.000								
		5				4	758.83	92	91		325	239	—	—	
		10				4	761.67	93	91		325	237	63	5.2	14.9
		15				5	764.52	95	92		325	237	63	5.2	14.9
		20				5	767.18	96	93		325	236	63	5.1	15.0
		25				5	770.10	97	93		324	260	61	5.1	15.0
		30				6	772.92	99	94		325	261	58	5.5	14.6
		35				7	775.66	99	96		325	253	63	3.7	16.3
		40				8	778.46	99	99		325	254	58	3.7	16.3
		45				8	781.30	99	98		325	254	57	3.7	16.3
		50				9	784.18	100	98		325	255	57	3.8	16.2
		55				10	787.10	100	98		325	255	58	3.8	16.2
		60				10	789.911	99	97		325	256	58	—	—
AVERAGE							33.911	96.1						4.5	

Sample Train Leak Checks: Pre Test <0.001 ft^3 @ 9 in. Hg
Post Test <0.01 ft^3 @ 8 in. Hg

Pitot Tube Leak Checks: PreTest — @ — in. H_2O
Post Test — @ — in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.

CTM 027 NH_3 SAMPLING FIELD DATA SHEET

Page _____ of _____

TEST ID	AH1-NH3-4	METER BOX	N-4	CAL. DATA: delta H		Comments:	
PLANT	AES Greenidge	PITOT TUBE DESC		Y	1.002		
LOCATION	Air Heater Inlet	PROBE LENGTH [ft]	31	C(p)			
DATE	6-13-08	NOZZLE ID [inch]		FILTER BOX SETTING	NA		
OPERATOR(S)	KRC	%H_2O (Assumed)	8	PROBE HTR SETTING	325		
AMBIENT TEMP [°F]	103	FILTER ID	1237	DUCT X-SECTION	circ ?	rect ?	other:
BAR. PRESS. [" Hg]	29.62	K FACTOR		DUCT DIMENSIONS		DUCT AREA	

TRAVERSE POINT [port-inch]	CLOCK TIME (24-hr)	SAMPLE TIME [minute]	STATIC PRES [" H_2O]	PITOT HEAD [" H_2O]	METER DIFF PRESSURE [" H_2O]	METER VACUUM [" Hg]	METER READING [ft^3]	METER TEMP [oF] inlet	METER TEMP [oF] outlet	STACK TEMP [°F]	PROBE TEMP [°F]	~~FILTER BOX~~ H [°F] L	LAST IMP TEMP [°F]	METER EXHAUST O_2 [% vol]	METER EXHAUST CO_2 [% vol]
	3:05	0					792.700								
		5				4	795.62	103	103		324	252	61	4.4	15.6
		10				5	798.10	104	102		325	251	58	—	—
		15				5	800.95	105	103		325	251	56	4.5	15.5
		20				5	803.88	106	104		325	251	56	4.3	15.7
		25				5	806.75	107	104		325	251	57	4.4	15.6
	3:35	30				6	809.53	107	104		325	252	57	4.5	15.6
														Ave=4.44	
	3:45	35				6	812.50	106	104		324	251	61	5.3	14.8
		40				7	815.33	107	104		325	251	57	5.3	14.8
		45				7	818.27	107	105		325	252	58	5.7	14.3
		50				8	821.14	108	105		325	254	61	5.5	14.6
		55				8	824.09	108	105		325	254	61	5.5	14.6
	4:15	60				9	826.935	108	105		325	255	61	5.3	14.6
														Ave=5.47	
AVERAGE							34.735	105.2			324.8	252.1	58.7	4.93	

Sample Train Leak Checks: Pre Test <0.01 ft^3 @ 6 in. Hg; Post Test <0.01 ft^3 @ 6 in. Hg

Pitot Tube Leak Checks: PreTest ___ @ ___ in. H_2O; Post Test ___ @ ___ in. H_2O

CONSOLENERGY

NOTE: Purge for 10 minutes at end of sampling.