



Farzie Shelton, ChE; REM

Associate GM Technical Support

SENT VIA FEDEX

RECEIVED

MAR 31 2010

**BUREAU OF
AIR REGULATION**

March 30, 2010

Mr. Jeff Koerner, P.E.
Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: C.D. McIntosh, Jr. Power Plant – Permit Nos. 1050004-019/027-AC
Unit 3 (E.U. 006) –Sulfuric Acid Mist and NH₃ Slip Tests Reports

Dear Mr. Koerner:

Per Conditions #8 of Permit No. 1050004-027-AC and Condition #19 of Permit No. 1050004-019-AC, Lakeland Electric performed performance tests to demonstrate that the installation of the selective catalytic reduction system did not result in an emission increase of sulfuric acid mist emissions which would equal or exceed the respective significant emission rates as defined in Rule 62-210.300, F.A.C. for Unit 3 (E.U. 006) and that ammonia slip emissions were within permit limits. This test report contains all stack emissions data obtained and cited in the previously submitted protocol, additionally, a summary report will follow shortly which summarizes all emissions data obtained to develop and implement an algorithm/curve for our sorbent injection system. Attached to this cover letter you will find the test report provided by Catalyst Air Management along with Lakeland Electric's Responsible Official Certification page signed by Mr. Tom Trickey and a copy of the e-mail in which the test report was originally submitted.

City of Lakeland • Department of Electric Utilities

501 East Lemon Street • Lakeland, FL 33801-5050 • 863. 834.6603 • Fax 863. 834.8187 • Cell 863.430.8297

farzie.shelton@lakelandelectric.com

Page 1 of 2

March 30, 2010

Mr. Jeff Koerner, P.E.
Bureau of Air Regulation

If you have any questions regarding this submittal please feel free to contact me at (863) 834-6603.

Sincerely,



Farzie Shelton

Enclosures: Unit 3 SAM Stack Test Report (Catalyst); R.O. cert. page (T. Trickey); e-mail to B. Schroeder (3/26/10)

cc: Ms. Danielle Henry
Air Compliance Supervisor
Florida Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

Mr. William Schroeder
Engineer IV
Florida Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

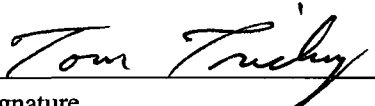
City of Lakeland • Department of Electric Utilities

501 East Lemon Street • Lakeland, FL 33801-5050 • 863. 834.6603 • Fax 863. 834.8187 • Cell 863.430.8297

farzie.shelton@lakelandelectric.com

Page 2 of 2

Responsible Official Certification

1. Responsible Official Name : Thomas J. Trickey, P.E., Plant Manager	
2. Responsible Official Mailing Address... Organization/Firm: Lakeland Electric Street Address: 501 E. Lemon St. City: Lakeland State: FL Zip Code: 33801-5079	
3. Owner/Authorized Representative Telephone Numbers... Telephone: (863) 834-6477 ext. Fax: (863) 834-5670	
4. Responsible Official Email Address: Tom.Trickey@lakelandelectric.com	
5. Responsible Official Statement: <i>I, the undersigned, am a responsible official of the Title V source addressed in this submittal. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this submission are true, accurate and complete. The air pollutant emissions units and air pollution control equipment described in this submittal will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this submittal to which the Title V source is subject. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in any compliance plan(s) previously submitted.</i> Subject: Lakeland Electric C.D. McIntosh, Jr. Power Plant - Unit 3 (E.U. 006) Sulfuric Acid Mist and NH3 Slip Tests 1050004-019/027-AC	
 Signature	<u>3-26-10</u> Date

Galbraith, Bret

From: Galbraith, Bret
Sent: Friday, March 26, 2010 10:08 PM
To: Bill.Schroeder@dep.state.fl.us
Cc: Danielle Henry (Danielle.D.Henry@dep.state.fl.us); Galbraith, Bret; Cooper, Kaley
Subject: Lakeland Electric SCR Tests
Attachments: McIntosh 3 SCR Compliance_NH3Slip_TestSubmittal.pdf

Bill-

Attached you will find the initial report required for the installation of our SCR on Unit 3. We will have a follow up as required by the permit within 45 days. Please call me when you review this report as the testing program was complex. Thank you.

-Bret Galbraith
c: 813-351-0149



AIR QUALITY TESTING SERVICES

LAKELAND ELECTRIC
C.D. McINTOSH POWER PLANT
UNIT 3

SCR AND LIME INJECTION PERFORMANCE TEST REPORT

Catalyst Air Management, Inc.
Report Number 138-152

MARCH 26, 2010
Test Dates: February 1-10, 2010



**LAKELAND ELECTRIC
C.D. MCINTOSH
UNIT**

SCR AND LIME INJECTION PERFORMANCE TEST REPORT

**CATALYST AIR MANAGEMENT, INC.
REPORT NUMBER 138-152**

MARCH 26, 2010
Test Date: February 25, 2009

RECEIVED

MAR 31 2010

**BUREAU OF
AIR REGULATION**

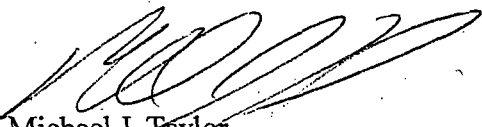
Prepared for
Mr. Bret Galbraith
Lakeland Electric
501 East Lemon Street
Lakeland, FL 33810



STATEMENT OF VALIDITY

Lakeland Electric – C.D. McIntosh Unit 3
Catalyst Report 138-148
March 26, 2010

To the extent practical, information and data provided in this test report has been verified as true and correct.



Michael J. Taylor
President

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

TITLE PAGE

STATEMENT OF VALIDITY

i

TABLE OF CONTENTS

ii-iii

PROJECT FACT SHEET

iv

1	Introduction	1
2	Summary of Test Results	1
3	Results of Testing	1-8
4	Description of Combustion Unit	9
5	Description of CEMS	9
6	Sampling Program Procedures	9-11
7	Operating Conditions	11
8	Quality Assurance	12
9	Discussion	12-13

APPENDICES

1	Test Results – NH ₃	14-23
2	Test Results – SO ₃	24
	February 1, 2010	24-28
	February 2, 2010	29-34
	February 3, 2010	35-38
	February 8, 2010	39-44
	February 9, 2010	45-50
3	Plant Operating Data	51
	February 1, 2010	51-59
	February 2, 2010	60-68
	February 3, 2010	69-77
	February 8, 2010	78-86
	February 9, 2010	87-95
	February 10, 2010	96-103
	ESP Data	104-105
4	Lab Analysis	106
	Ammonia	106-113
	SO ₃	114-119
	Coal	120-122
6	Reference Method Quality Assurance	123
	Isokinetic Sampling Equipment	123-130
	Calibration Gas Specification Sheets	131-144

TABLE OF CONTENTS

6	Sample Calculations	134-140
7	Figures	141-145

PROJECT FACT SHEET

NAME OF SOURCE OWNER: Lakeland Electric

SOURCE IDENTIFICATION: C.D. McIntosh Unit 3
FDEP ID No. 1050004 EU No. 006

LOCATION OF SOURCE: 3030 East Lake Parker Dr.
Lakeland, FL 33805

TYPE OF OPERATION: Electric Utility Steam Generating Unit

TYPES OF TESTS PERFORMED: Sample Traverse-EPA Method 1
Volumetric Flow Rate-EPA Method 2
Oxygen/Carbon Dioxide-EPA Method 3A
Moisture Content-EPA Method 4
Sulfuric Acid Mist-NCASI Method 8A
Ammonia-EPA CTM 027

TEST COMPANY: Catalyst Air Management, Inc.
2505 Byington-Solway Road
Knoxville, TN 37931

SITE SUPERVISOR: Mike Taylor - Principal
Jack Martin - Engineer

TEST PERSONNEL: Josh Nicely - Testing Supervisor
Rick Derrera - Lead Technician
Dustin Urban - Scientist
William Sapp - Scientist
Huedon Love - Technician
Frank Mo - Chemist
Lang Le - Chemist
Katherine Strickland - Chemist

TEST DATES: February 1-10, 2010

OWNERS REPRESENTATIVE: Robby Kniss
Christine More

TEST OBSERVER: Bill Schroeder - FDEP
James Burkholder - FDEP

1.0 Introduction

Catalyst Air Management, Inc. (Catalyst) was contracted by the City of Lakeland to conduct the performance testing of the retrofitted SCR and lime sorbent injection system at C.D. McIntosh Power Plant Unit 3. The source emission testing was to determine the ammonia slip and sulfuric acid mist emissions from the new systems.

The sampling program was conducted February 1 through 10, 2010. The testing was performed by Messrs. Mike Taylor, Jack Martin, Rick Derrera, Dustin Urban, William Sapp, Huedon Love Frank Mo, Lang Le and Katherine Strickland of Catalyst with the assistance of personnel assigned by Lakeland Electric. Ms Christine More and Mr. Robert Kniss of Lakeland Electric coordinated plant operation during the testing.

2.0 Summary of Test Results

A summary of test results developed by this source sampling program are presented in Tables 1 through 8. The summary tables are presented as follows:

<u>Table</u>	<u>Description</u>	<u>Page</u>
1	Summary of NOx Emissions	1
2	Isokinetic Sampling Summary – NH ₃	2
3	Summary of SO ₃ Emissions	3
4	Acid Mist Sampling Summary – 2/1/10	4
5	Acid Mist Sampling Summary – 2/2/10	5
6	Acid Mist Sampling Summary – 2/3/10	6
7	Acid Mist Sampling Summary – 2/8/10	7
8	Acid Mist Sampling Summary – 2/9/10	8

3.0 Results of Testing

The individual test run results are tabulated in Appendices 1 through 3.

TABLE 1
Summary of Ammonia Emissions
C. D McIntosh 3

Pollutant	Avg Volume (L)	Avg PPM @ 3% O₂	Avg lb/hr
Ammonia	0.04	0.05	0.09

TABLE 2
ISOKINETIC SAMPLING SUMMARY
EPA CTM-027 - Ammonia

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Stack**

Run Number:	1	2	3
Date:	2/10/2010	2/10/2010	2/10/2010
Run Time: Start	11:52	13:18	14:43
End	13:04	14:28	15:55
Unit Load (MW):	365	365	365
Unit Load (MMBTU/HR):	3631	3644	3656
DN - Nozzle Diameter:	0.185	0.185	0.185
Pbar - Barometric Pressure:	29.85	29.85	29.85
TT - Sampling Time:	60	60	60
VM - Meter Volume:	38.437	39.035	38.82
TM - Avg. Meter Temp (F):	55	61	80
PM - Avg. Delta H (in. of H2O):	1.333	1.379	1.350
Y - Meter Calibration Factor:	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	40.232	40.416	38.714
Vlc - Volume Water Collected:	84.3	80.5	84.6
%M - Percent Moisture:	9.0	8.6	9.3
Bws - Mole Fraction, Dry:	0.090	0.086	0.093
%CO2 - Carbon Dioxide, Dry:	11.8	11.8	11.8
%O2 - Oxygen, Dry:	6.6	6.7	6.7
%EA - Excess Air	44.2	45.2	45.5
MD - Dry Molecular Weight:	30.15	30.15	30.16
MS - Wet Molecular Weight:	29.06	29.11	29.02
A - Stack Area, SQ.FT:	271.84	271.84	271.84
PS - Static Press. (in. of Hg):	29.80	29.81	29.81
TS - Stack Temp. (F):	137	138	139
CP - Pitot Coefficient:	0.84	0.84	0.84
VS - Stack Gas Velocity (AFPS):	71.3	72.5	71.9
QS - Stack Gas Volume (DSCFM):	932,755	951,984	934,098
QA - Stack Gas Volume (ACFM):	1,162,688	1,183,282	1,172,843
%I - Isokinetic Ratio:	104.7	103.1	100.7
L - Volume (NH3):	3.74E-05	4.01E-05	4.82E-05
PPM - Concentration (NH3):	0.03	0.04	0.04
PPMV, dry @ 3% O2 - (NH3):	0.04	0.04	0.06
lb / mmBtu - Emission Rate (NH3):	2.07E-05	2.23E-05	2.80E-05
Emission Rate - lb/hr:	0.08	0.09	0.11

Average PPM **0.04**
 Average PPMV, dry @ 3% O2 **0.05**
 Average lb/mmbtu **2.37E-05**
 Average lb/hr **0.09**

TABLE 3
Summary of SO₃ Emissions
C.D. McIntosh 3

Run	Load (MW)	Heat Input (mmBtu/hr)	Lime Injection (lb/hr)	SO ₃ (ppm @ 3% O ₂)	SO ₃ (lb/mmBtu)
1	270	2767	0	0.68	0.001
2	270	2777	0	0.96	0.001
3	320	3305	0	1.33	0.002
4	320	3307	0	1.21	0.002
5	270	2832	956	0.42	0.001
6	270	2842	503	0.51	0.001
7	365	3571	55	1.34	0.002
8	365	3893	0	1.45	0.002
9	365	3908	0	1.22	0.002
10	365	3807	120	1.16	0.002
11	365	3825	361	1.18	0.002
12	365	3822	247	1.21	0.002
13	320	3291	0	0.44	0.001
14	320	3240	0	0.53	0.001
15	320	3287	105	0.68	0.001
16	320	3285	316	0.64	0.001
17	320	3288	211	0.61	0.001
18	270	2911	0	0.62	0.001
19	270	2928	0	0.79	0.001
20	270	2938	89	0.84	0.001
21	270	2960	268	0.77	0.001
22	270	2961	179	0.78	0.001

TABLE 4
ACID MIST SAMPLING SUMMARY
EPA Method 8A

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Stack**

Run Number:	1	2	3	4
Date:	2/1/10	2/1/10	2/1/10	2/1/10
Load (MW):	270	270	320	320
Run Time: Start	10:35	13:10	15:43	17:56
End	11:35	14:10	16:43	18:56
Pbar - Barometric Pressure:	29.96	29.96	29.96	29.96
TT - Sampling Time:	60.0	60.0	60.0	60.0
VM - Meter Volume:	28.946	29.086	29.056	29.159
TM - Avg. Meter Temp (F):	65	67	69	71
PM - Avg. Delta H (in. of H ₂ O):	0.75	0.75	0.75	0.75
Y - Meter Calibration Factor:	1.02	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	29.790	29.807	29.677	29.675
Vlc - Volume Water Collected:	76.1	79.6	80.6	73.7
%M - Percent Moisture:	10.74	11.17	11.34	10.47
Bws - Mole Fraction, Dry:	0.107	0.112	0.113	0.105
%CO ₂ - Carbon Dioxide, Dry:	13.3	13.2	13.1	13.2
%O ₂ - Oxygen, Dry:	6.1	6.0	6.1	6.0
MD - Dry Molecular Weight:	30.37	30.35	30.34	30.35
MS - Wet Molecular Weight:	29.04	28.97	28.94	29.06
PS - Static Press. (in. of Hg):	29.92	29.92	29.92	0.00

SO₃

ppm - Emission Concentration:	0.559	0.801	1.098	1.006
ppm @ 3% O ₂ - Emission Concentration	0.677	0.962	1.328	1.208
lb/mmBtu - Emission Rate:	0.001	0.001	0.002	0.00

Average ppm	0.819	Average ppm	1.052
Average ppm @ 3%O ₂	0.989	Average ppm @ 3%O ₂	1.268
Average lb/mmBtu	0.001	Average ppm @ 3%O ₂	0.002

TABLE 5
ACID MIST SAMPLING SUMMARY
 -EPA Method 8A

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Stack**

Run Number:	5	6	7	8	9
Date:	2/2/10	2/2/10	2/2/10	2/2/10	2/2/10
Load (MW):	270	270	365	365	365
Run Time: Start	6:35	9:02	15:05	17:30	19:44
End	7:35	10:02	16:05	18:30	20:44
Pbar - Barometric Pressure:	29.74	29.74	29.74	29.74	29.74
TT - Sampling Time:	60.0	60.0	60.0	60.0	60.0
VM - Meter Volume:	29.280	29.419	28.995	29.019	28.953
TM - Avg. Meter Temp (F):	71	73	71	70	66
PM - Avg. Delta H (in. of H2O):	0.75	0.75	0.75	0.75	0.75
Y - Meter Calibration Factor:	1.02	1.02	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	29.547	29.581	29.283	29.376	29.514
Vlc - Volume Water Collected:	84.3	82.4	83.3	86.8	68.5
%M - Percent Moisture:	11.85	11.60	11.82	12.22	9.85
Bws - Mole Fraction, Dry:	0.118	0.116	0.118	0.122	0.099
%CO2 - Carbon Dioxide, Dry:	12.7	12.9	11.8	11.5	11.7
%O2 - Oxygen, Dry:	6.1	6.0	6.7	6.7	6.7
MD - Dry Molecular Weight:	30.28	30.30	30.16	30.11	30.14
MS - Wet Molecular Weight:	28.82	28.88	28.72	28.63	28.94
PS - Static Press. (in. of Hg):	29.70	29.70	29.70	29.70	29.70
SO3					
ppm - Emission Concentration:	0.342	0.420	1.059	1.151	0.980
ppm @ 3% O2 - Emission Concentration	0.414	0.505	1.335	1.452	1.235
lb/mmBtu - Emission Rate:	0.001	0.001	0.002	0.002	0.002

Average ppm	0.381	Average ppm	1.063
Average ppm @ 3%O2	0.459	Average ppm @ 3%O2	1.341
Average ppm @ 3%O2	0.001	Average ppm @ 3%O2	0.002

TABLE 6
ACID MIST SAMPLING SUMMARY
EPA Method 8A

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Stack**

Run Number:	10	11	12
Date:	2/3/10	2/3/10	2/3/10
Load (MW):	365	365	365
Run Time: Start	8:45	12:55	17:25
End	9:45	13:55	18:25
Pbar - Barometric Pressure:	29.99	29.99	29.99
TT - Sampling Time:	60.0	60.0	60.0
VM - Meter Volume:	28.738	28.882	28.876
TM - Avg. Meter Temp (F):	60	64	66
PM - Avg. Delta H (in. of H ₂ O):	0.75	0.75	0.75
Y - Meter Calibration Factor:	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	29.905	29.820	29.687
Vlc - Volume Water Collected:	104	101	100
%M - Percent Moisture:	14.07	13.76	13.69
Bws - Mole Fraction, Dry:	0.141	0.138	0.137
%CO ₂ - Carbon Dioxide, Dry:	12.9	13.5	12.8
%O ₂ - Oxygen, Dry:	6.7	5.8	6.7
MD - Dry Molecular Weight:	30.33	30.39	30.32
MS - Wet Molecular Weight:	28.60	28.69	28.63
PS - Static Press. (in. of Hg):	29.95	29.95	29.94
SO₃			
ppm - Emission Concentration:	0.918	1.000	0.961
ppm @ 3% O ₂ - Emission Concentration	1.157	1.185	1.212
lb/mmBtu - Emission Rate:	0.002	0.002	0.002

Average ppm **0.959**
 Average ppm @ 3% O₂ **1.184**
 Average lb/mmBtu **0.002**

TABLE 7
ACID MIST SAMPLING SUMMARY
EPA Method 8A

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Unit 3 Stack**

Run Number:	13	14	15	16	17
Date:	2/8/10	2/8/10	2/8/10	2/8/10	2/8/10
Load (MW):	320	320	320	320	320
Run Time: Start	8:30	10:20	12:20	15:30	17:07
End	9:30	11:20	13:20	16:30	18:07
Pbar - Barometric Pressure:	29.90	29.90	29.90	29.90	29.90
TT - Sampling Time:	60.0	60.0	60.0	60.0	60.0
VM - Meter Volume:	28.592	28.902	29.036	29.248	29.409
TM - Avg. Meter Temp (F):	53	63	70	74	77
PM - Avg. Delta H (in. of H2O):	0.75	0.75	0.75	0.75	0.75
Y - Meter Calibration Factor:	1.02	1.02	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	30.045	29.813	29.519	29.248	29.499
Vlc - Volume Water Collected:	76	80	81	76	74
%M - Percent Moisture:	10.65	11.22	11.45	10.81	10.57
Bws - Mole Fraction, Dry:	0.106	0.112	0.114	0.108	0.106
%CO2 - Carbon Dioxide, Dry:	11.5	11.5	11.6	12.0	12.1
%O2 - Oxygen, Dry:	7.5	7.6	7.8	7.5	7.5
MD - Dry Molecular Weight:	30.14	30.14	30.17	30.22	30.24
MS - Wet Molecular Weight:	28.85	28.78	28.78	28.90	28.94
PS - Static Press. (in. of Hg):	29.86	29.86	29.86	29.86	29.86
SO3					
ppm - Emission Concentration:	0.328	0.397	0.503	0.475	0.455
ppm @ 3% O2 - Emission Concentration	0.438	0.534	0.687	0.635	0.608
lb/mmBtu - Emission Rate:	0.001	0.001	0.001	0.001	0.001

Average ppm: **0.432**
 Average ppm @ 3% O2: **0.580**
 Average lb/mmBtu: **0.001**

TABLE 8
ACID MIST SAMPLING SUMMARY
EPA Method 8A

Client: **Lakeland Electric**
 Plant: **McIntosh Unit 3**
 Location: **Stack**

Run Number:	18	19	20	21	22
Date:	2/9/10	2/9/10	2/9/10	2/9/10	2/9/10
Load (MW):	270	270	270	270	270
Run Time: Start	6:18	8:05	9:55	11:40	13:25
End	7:18	9:05	10:55	12:40	14:25
Pbar - Barometric Pressure:	29.75	29.75	29.75	29.75	29.75
TT - Sampling Time:	60.0	60.0	60.0	60.0	60.0
VM - Meter Volume:	28.679	28.577	28.954	28.790	28.742
TM - Avg. Meter Temp (F):	62	64	67	74	73
PM - Avg. Delta H (in. of H ₂ O):	0.75	0.75	0.75	0.75	0.75
Y - Meter Calibration Factor:	1.02	1.02	1.02	1.02	1.02
VMSTD - Std. Gas Volume (SCF):	29.487	29.233	29.464	28.790	28.946
Vlc - Volume Water Collected:	72	73	76	75	76
%M - Percent Moisture:	10.31	10.52	10.83	10.88	11.01
Bws - Mole Fraction, Dry:	0.103	0.105	0.108	0.109	0.110
%CO ₂ - Carbon Dioxide, Dry:	10.9	10.8	11.0	10.7	10.8
%O ₂ - Oxygen, Dry:	8.3	8.5	8.5	8.7	8.5
MD - Dry Molecular Weight:	30.08	30.07	30.10	30.06	30.07
MS - Wet Molecular Weight:	28.83	28.80	28.79	28.75	28.74
PS - Static Press. (in. of Hg):	29.71	29.71	29.71	29.71	29.71
SO₃					
ppm - Emission Concentration:	0.437	0.545	0.583	0.527	0.538
ppm @ 3% O ₂ - Emission Concentration	0.620	0.787	0.842	0.773	0.777
lb/mmBtu - Emission Rate:	0.001	0.001	0.001	0.001	0.001

Average ppm **0.526**
 Average ppm @ 3% O₂ **0.760**
 Average lb/mmBtu **0.001**

4.0 Description Of Combustion Unit

McIntosh Unit 3 is a steam generating utility boiler. The unit is permitted to burn natural gas, No. 6 residual fuel oil, bituminous coal, and co-fire with refuse derived fuel (RDF) and petroleum coke at a maximum heat input rate of 3,640 MMBtu/hr. The rated generation capacity of the turbine/generator is approximately 364 MW gross. The flue gas from the unit is passed through an electrostatic precipitator and wet scrubber for control of particulate and SO₂ emissions. Low NO_x burners are used to control NO_x emissions. The flue gas is exhausted into the Unit 3 stack.

The Unit 3 stack height is approximately 275 feet. The testing platform is located on the stack approximately 86 feet above the inlet duct. Four test ports facilitate the sampling.

5.0 Description of CEMS

The Unit 3 CEMS is a dilution extraction system (400:1 ratio) that measures SO₂, NO_x and CO₂ concentrations and flow at the sampling location. The CEMS analyzers include a Thermo Environmental model 42i NO_x monitor, a Thermo Environmental model 43i SO₂ monitor, a Thermo Environmental model 410i CO₂ monitor, a Thermo Environmental model 48i CO monitor, and a United Sciences Ultraflow Model 100 monitor. The recording and reporting requirements are performed by a computerized data acquisition and handling system (DAHS).

Unit 3 CEMS

- (1) TECO NO_x - 42i-0608716016
- (1) TECO SO₂ - 43i-06087106018
- (1) TECO CO₂ - 410i-0608716015
- (1) TECO CO - 48i-TLE 0712221616
- (1) United Sciences Ultraflow 100 - Serial No. 1001060

The data acquisition and handling system utilizes an Fc factor (scf/mmBtu) based on the fuel to calculate NO_x emissions in lbs/mmBtu. The analyzers measure on a wet basis. The data acquisition and handling system reports the volumetric flow data in standard cubic feet per hour (SCFH).

6.0 Sampling Program Procedures

The following test methods were utilized during the test program:

EPA Method 1	Sample and Velocity Traverse for Stationary Sources
EPA Method 2	Determination of Stack Gas Velocity and Volumetric Flow Rate
EPA Method 3A	Gas Analysis for CO ₂ , O ₂ , Excess Air and Dry Molecular Weight (Instrumental Analyzer Method)
EPA Method 4	Determination of Moisture Content in Stack Gas

NCASI Method 8A	Determination of Sulfuric Acid Vapor or Mist and Sulfur Dioxide Emissions from Stationary Sources from Kraft Recovery Furnaces
EPA Method 027	Procedure for Collection and Analysis of Ammonia in Stationary Sources

6.1 Ammonia – EPA Conditional Method 027

The ammonia emissions were determined in accordance with procedures outlined in EPA Conditional Method 027. The flue gas sample was extracted isokinetically from the gas stream and the ammonia emissions were determined by ion chromatography. The probe and filter were both maintained at stack conditions. The sampling train consists of the following equipment connected in series:

Glass nozzle and glass fiber filter within a glass filter holder

Glass lined probe

A modified Greenburg-Smith impinger containing 100 ml of 0.1N sulfuric acid

A Greenburg-Smith impinger containing 100 ml of 0.1N sulfuric acid

A modified Greenburg-Smith impinger, empty

A modified Greenburg-Smith impinger containing 250 g of silica gel

The sample volume was measured by passing it through a calibrated dry gas meter. An S-type pitot tube was attached to the probe to measure stack gas velocity and to maintain isokinetic sampling. A K-type thermocouple was also attached to the probe to measure the gas temperature.

After each run, the filter was removed and placed in a labeled container. The contents of impingers 1, 2 and 3 were measured for increase in volume. Impingers 2 and 3 were combined and retained in a separate container. Each impinger and graduated cylinder is rinsed with DI water, the rinses are added to the individual impinger samples. Next, the probe is rinsed with DI water. The probe rinse was combined with Impinger 1 contents and rinse.

The silica gel was returned to the original tared container and weighed to determine moisture gain. The samples are placed in plastic bags and stored in a cooler.

6.2 Sulfuric Acid Mist - NCASI Method 8A

Acid Mist emissions were determined in accordance with EPA Method 8A procedures. A gas sample was extracted at a constant flow rate from the flue gas and the sulfuric acid mist, including SO₃, was separated and measured by barium-thorin titration. The sulfuric acid mist fraction of the train was the only portion analyzed. The probe and filter were maintained at 500 °F. The condenser coil was maintained between 167 and 185°F. The sampling train consists of the following equipment connected in series:

Quartz nozzle and heated quartz lined probe
Heated quartz filter holder with quartz filter
A modified Graham condenser with Type C glass frit and 200 cm of 5-mm ID glass
A Greenburg-Smith impinger containing 100 ml of a 3% hydrogen peroxide solution
A modified Greenburg-Smith impinger containing 100 ml of a 3% hydrogen peroxide
A Greenburg-Smith impinger containing 100 ml of DI H₂O
A modified Greenburg-Smith impinger containing 250g of silica gel

The sample volume was measured by passing it through a calibrated dry gas meter. An S-type pitot tube was attached to the probe to measure stack gas velocity and to maintain isokinetic sampling. A K-type thermocouple was attached to the probe to measure the gas temperature.

After the run, the probe was disconnected from the sample train. The remaining portion was purged for 15 minutes at the average sampling rate of the run.

The probe, filter holder and condenser were triple rinsed with deionized and the washings were retained for SO₃/H₂SO₄ analysis. The peroxide and deionized H₂O impingers' contents were recovered and the impingers and connecting glassware were rinsed with distilled water and were retained, however SO₂ analysis was not performed. Each sample was analyzed by barium thorin titration to determine SO₃/H₂SO₄ concentrations.

6.3 O₂ and CO₂ – EPA Method 3A

The O₂ and CO₂ concentrations were determined simultaneously with each of the test runs. A sample was continuously extracted and introduced into a Telgan O₂/CO₂ analyzer for determination of gas concentrations. The sample was extracted through a heated stainless steel probe, heated sample line and sample conditioner to dry the sample before it enters the analyzer. A sample flow control system was used to control the flow into the analyzer. The analyzer was calibrated prior to starting the testing with EPA Protocol 1, calibration gases.

All the sampling procedures, quality assurance, analysis and calculations utilized for the program were performed in accordance with the Code of Federal Regulations, Title 40, Part 60, Appendix A.

7.0 Operating Conditions

Operating conditions were monitored throughout the duration of the sampling program by Lakeland Electric personnel.

8.0 Quality Assurance Procedures

The quality assurance procedures followed during the testing activities followed guidelines set forth by the previous mentioned methods and the EPA Quality Assurance Handbook for Source Sampling. The specific procedures for this test program are listed below.

8.1 Isokinetic Equipment

The sample nozzles were visually inspected and measured across three different diameters to determine the appropriate nozzle diameter.

The S-type pitot tubes were visually inspected and measured to meet the design specifications of EPA Method 2 for a 0.84 pitot coefficient.

Both legs of the pitot tube were leaked checked before and after each sample run.

The stack thermocouples were calibrated prior to the testing and a post-test check was performed after the testing project.

The manometer was leveled and zeroed before each sample run.

The dry gas meter is fully calibrated semi-annually using an EPA intermediate standard. Post -test dry gas meter checks were completed to verify the accuracy of the meter Yi.

Pre-test and post-test leak checks were completed and were less than 0.02 cfm at the highest sampling vacuum..

8.2 Instrumental Methods

Analyzer calibrations, system bias check and drift checks were completed before and after each sample run utilizing EPA Protocol 1 calibration gases.

The analyzer interference responses were determined in accordance with Section 7.2 through 7.6 of Method 6C.

9.0 Discussion

9.1 Chain of Custody

The ammonia field samples, were collected, sealed and transported to the Catalyst, TN office in Knoxville, TN then shipped to the Maxxam Analytics laboratory in Burlington, Ontario, Canada under the supervision of Mike Taylor. The SO₃ samples were processed and analyzed in the plant laboratory.

The samples were labeled to identify the following:

Client and source	Date
Type of Sample	Run number
Sample location	Sample fraction

9.2 Sampling Conditions and Concerns

The SO₃ testing was performed February 1 through 9, 2010 at baseline conditions (no lime injection) and various lime injection rates with the unit operating at 270, 320 and 365 MW.

The NH₃ testing was performed February 10, 2010 at 365 MW with the SCR in service.

APPENDIX 1
TEST RESULTS - NH₃

Catalyst Air Management, Inc.
Method CTM-027 Isokinetic Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: 1

Date: 2/10/10

Start Time: 11:52

End Time: 13:04

DIAMETER OF NOZZLE: 0.185		STACK DIAMETER: 223.25 inches
AREA OF NOZZLE: 1.867E-04 A_n		AREA OF STACK: 271.8 sq. ft.
BAROMETRIC PRESSURE: 29.85 P_{bar}		VOLUME OF MOISTURE: 84.3 V_k
GAS METER Y-FACTOR: 1.02 Y		PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	VEL HEAD	PM ORIFICE	METER IN	TEMP OUT	STACK TEMP	CO2%	O2%	STATIC PRESS	SDE	VEL
238.306												
A-1	2.5	240.0	1.60	1.50	52	52	136				30.88	75.4
2	2.5	241.7	1.60	1.50	52	52	138	11.8	6.4	-0.63	30.93	75.5
3	2.5	243.4	1.60	1.50	52	52	138				30.93	75.5
4	2.5	245.1	1.60	1.50	53	52	138				30.93	75.5
5	2.5	246.7	1.50	1.40	53	52	137				29.92	73.0
6	2.5	248.312	1.30	1.20	54	52	134				27.79	67.8
248.312												
B-1	2.5	249.9	1.40	1.30	54	53	138				28.93	70.6
2	2.5	251.5	1.50	1.40	54	53	138				29.95	73.1
3	2.5	253.1	1.40	1.30	54	53	138	11.8	6.6		28.93	70.6
4	2.5	254.7	1.40	1.30	55	53	137				28.91	70.5
5	2.5	256.3	1.30	1.20	55	53	137				27.86	68.0
6	2.5	257.699	1.10	1.00	55	53	135				25.58	62.4
257.699												
C-1	2.5	259.3	1.40	1.30	55	54	134				28.84	70.4
2	2.5	260.9	1.40	1.30	56	54	136	11.7	6.8		28.89	70.5
3	2.5	262.5	1.50	1.40	56	54	137				29.92	73.0
4	2.5	264.1	1.50	1.40	57	55	138				29.95	73.1
5	2.5	265.8	1.50	1.40	57	55	138				29.95	73.1
6	2.5	267.163	1.10	1.00	58	55	134				25.56	62.4
267.163												
D-1	2.5	268.7	1.50	1.40	58	56	136				29.90	73.0
3	2.5	270.3	1.50	1.40	58	56	137	11.8	6.6		29.92	73.0
3	2.5	271.9	1.40	1.30	58	57	138				28.93	70.6
4	2.5	273.6	1.50	1.40	59	57	138				29.95	73.1
5	2.5	275.2	1.50	1.40	59	57	138				29.95	73.1
6	2.5	276.743	1.30	1.20	60	57	133				27.77	67.8

RESULT:	TT	VM	SQRT PIT	PM	TM	TS	CO2	O2	STATIC	SDE	VEL
	60.0	38.437	1.196	1.333	55	137	11.8	6.6	-0.63	29.21	71.3
	net	net	avg	avg	avg	avg	avg	avg	avg	avg	ft/sec

$P_g = 29.80$ $V_{m(std)} = 40.232$ $V_{w(std)} = 3.971$ %M = 8.98
 $B_{ws} = 0.090$ $M_d = 30.15$ $M_s = 29.06$ %EA = 44.15

STACK GAS VELOCITY = 71.3 AFPS V_s
 STACK GAS VELOCITY = 4,277 AFPM
 STACK GAS VOLUME = 932,755 DSCFM Q_{std}
 STACK GAS VOLUME = 1,162,688 ACFM Q_a
 ISOKINETIC RATIO = 104.7 %

EMISSIONS
 Probe/Impinger 1 Concentration (NH4) = 0.050 mg/l
 Volume (NH3) = 2.00E-05 l
 Concentration (NH3) = 0.02 ppm
 Impinger 2&3 Concentration (NH4) = 0.052 mg/l
 Volume (NH3) = 1.74E-05 l
 Concentration (NH3) = 0.02 ppm
 Total Volume (NH3) = 3.74E-05 l
 Total Concentration (NH3) = 0.03 ppm
 Total Concentration (NH3) @ 3% O2 = 0.04 ppm
 Emission Rate (NH3) = 2.07E-05 lb/mmBtu
 Emission Rate (NH3) = 0.08 lb/hr

Catalyst Air Management, Inc.
Method CTM-027 Isokinetic Sample Sheet

Client: Lakeland Electric
Unit Tested: McIntosh Unit 3
Sampling Location: Stack

Run No: 2

Date: 2/10/10

Start Time: 13:18

End Time: 14:28

DIAMETER OF NOZZLE: 0.185		STACK DIAMETER: 223.25	inches
AREA OF NOZZLE: 1.867E-04	A _n	AREA OF STACK: 271.8	sq. ft.
BAROMETRIC PRESSURE: 29.85	P _{bar}	VOLUME OF MOISTURE: 80.5	V _{lc}
GAS METER Y-FACTOR: 1.02	Y	PITOT COEFFICIENT: 0.84	C _p

POINT	TIME	GAS METER	VEL HEAD	PM ORIFICE	METER TEMP		STACK TEMP	CO2%	O2%	STATIC PRESS	SDE	VEL
					IN	OUT						
		277.283										
D-1	2.5	279.0	1.60	1.50	59	58	135				30.85	75.2
2	2.5	280.7	1.50	1.40	59	58	138	11.5	6.7	-0.60	29.95	73.0
3	2.5	282.3	1.60	1.50	59	58	139				30.96	75.5
4	2.5	283.9	1.50	1.40	59	58	139				29.97	73.1
5	2.5	285.5	1.50	1.40	60	58	139				29.97	73.1
6	2.5	287.132	1.40	1.30	60	59	137				28.91	70.5
		287.132										
C-1	2.5	288.7	1.40	1.30	60	59	137				28.91	70.5
2	2.5	290.3	1.40	1.30	60	59	139				28.96	70.6
3	2.5	291.9	1.50	1.40	60	59	138	11.8	6.7		29.95	73.0
4	2.5	293.5	1.50	1.40	60	59	137				29.92	73.0
5	2.5	295.1	1.50	1.40	61	59	138				29.95	73.0
6	2.5	296.688	1.30	1.20	60	59	135				27.81	67.8
		296.688										
B-1	2.5	298.3	1.50	1.40	61	59	137				29.92	73.0
2	2.5	299.9	1.50	1.40	61	60	138	12.0	6.6		29.95	73.0
3	2.5	301.6	1.50	1.40	62	60	138				29.95	73.0
4	2.5	303.2	1.40	1.30	63	60	137				28.91	70.5
5	2.5	304.8	1.50	1.40	63	60	139				29.97	73.1
6	2.5	306.318	1.20	1.10	64	61	138				26.79	65.3
		306.318										
A-1	2.5	307.9	1.50	1.40	62	61	139				29.97	73.1
2	2.5	309.7	1.60	1.50	63	61	139	11.8	6.8		30.96	75.5
3	2.5	311.3	1.60	1.50	64	61	138				30.93	75.4
4	2.5	313.1	1.70	1.50	64	61	139				31.91	77.8
5	2.5	314.7	1.50	1.40	64	62	138				29.95	73.0
6	2.5	316.318	1.40	1.30	65	62	134				28.84	70.3

RESULT:	TT	VM	SQRT PIT	PM	TM	TS	CO2	O2	STATIC	SDE	VEL
	60.0	39.035	1.217	1.379	61	138	11.8	6.7	-0.60	29.76	72.5
	net	net	avg	avg	avg	avg	avg	avg	avg	avg	ft/sec

P_s = 29.81 V_{m(std)} = 40.416
B_{ws} = 0.086 M_d = 30.15

V_{w(std)} = 3.792 %M = 8.58
M_s = 29.11 %EA = 45.20

STACK GAS VELOCITY = 72.5 AFPS V_s
STACK GAS VELOCITY = 4,353 AFPM
STACK GAS VOLUME = 951,984 DSCFM Q_{std}
STACK GAS VOLUME = 1,183,282 ACFM Q_a
ISOKINETIC RATIO = 103.1 %

EMISSIONS
Probe/Impinger 1 Concentration (NH4) = 0.055 mg/l
Volume (NH3) = 2.28E-05 l
Concentration (NH3) = 0.02 ppm
Impinger 2&3 Concentration (NH4) = 0.052 mg/l
Volume (NH3) = 1.74E-05 l
Concentration (NH3) = 0.02 ppm

Total Volume (NH3) = 4.01E-05 l
Total Concentration (NH3) = 0.04 ppm
Total Concentration (NH3) @ 3% O2 = 0.04 ppm
Emission Rate (NH3) = 2.23E-05 lb/mrrnBtu
Emission Rate (NH3) = 0.09 lb/hr

Catalyst Air Management, Inc.
Method CTM-027 Isokinetic Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: 3

Date: 2/10/10

Start Time: 14:43

End Time: 15:55

DIAMETER OF NOZZLE: 0.185	STACK DIAMETER: 223.25 inches
AREA OF NOZZLE: 1.867E-04 A _n	AREA OF STACK: 271.8 sq. ft.
BAROMETRIC PRESSURE: 29.85 P _{bar}	VOLUME OF MOISTURE: 84.6 V _e
GAS METER Y-FACTOR: 1.02 Y	PITOT COEFFICIENT: 0.84 C _p

POINT	TIME	GAS METER	VEL HEAD	PM ORIFICE	METER IN	TEMP OUT	STACK TEMP	CO2%	O2%	STATIC PRESS	SDE	VEL
316.601												
A-1	2.5	318.3	1.50	1.40	79	79	139				29.97	73.2
2	2.5	319.8	1.50	1.40	79	79	139	12.0	6.8	-0.60	29.97	73.2
3	2.5	321.5	1.40	1.30	79	79	139				28.96	70.7
4	2.5	323.1	1.40	1.30	80	79	138				28.93	70.6
5	2.5	324.7	1.40	1.30	80	79	138				28.93	70.6
6	2.5	326.203	1.30	1.20	80	79	138				27.88	68.1
326.203												
B-1	2.5	327.8	1.50	1.40	80	79	140				30.00	73.2
2	2.5	329.4	1.50	1.40	81	79	141	11.7	6.7		30.02	73.3
3	2.5	331.0	1.40	1.30	81	79	141				29.01	70.8
4	2.5	332.7	1.50	1.40	81	79	140				30.00	73.2
5	2.5	334.3	1.40	1.30	82	79	139				28.96	70.7
6	2.5	335.747	1.20	1.10	82	79	140				26.83	65.5
335.747												
C-1	2.5	337.3	1.40	1.30	81	80	138				28.93	70.6
2	2.5	339.0	1.50	1.40	81	80	139				29.97	73.2
3	2.5	340.6	1.50	1.40	82	80	139	11.8	6.7		29.97	73.2
4	2.5	342.2	1.50	1.40	82	80	138				29.95	73.1
5	2.5	343.9	1.50	1.40	83	80	139				29.97	73.2
6	2.5	345.442	1.30	1.20	83	80	136				27.84	68.0
345.442												
D-1	2.5	347.1	1.60	1.50	81	80	137				30.91	75.5
2	2.5	348.8	1.60	1.50	82	80	139	11.7	6.7		30.96	75.6
3	2.5	350.5	1.50	1.40	82	80	140				30.00	73.2
4	2.5	352.1	1.50	1.40	82	80	139				29.97	73.2
5	2.5	353.8	1.50	1.40	82	80	139				29.97	73.2
6	2.5	355.420	1.40	1.30	83	80	136				28.89	70.5

RESULT:	TT	VM	SQRT PIT	PM	TM	TS	CO2	O2	STATIC	SDE	VEL
	60.0	38.819	1.204	1.350	80	139	11.8	6.7	-0.60	29.45	71.9
	net	net	avg	avg	avg	avg	avg	avg	avg	avg	ft/sec

P_s = 29.81 V_{m(sta)} = 38.714 V_{v(sta)} = 3.985 %M = 9.33
 B_{ws} = 0.093 M_d = 30.16 M_s = 29.02 %EA = 45.49

STACK GAS VELOCITY = 71.9 AFPS V_s
 STACK GAS VELOCITY = 4,314 AFPM
 STACK GAS VOLUME = 934,098 DSCFM Q_{std}
 STACK GAS VOLUME = 1,172,843 ACFM Q_a
 ISOKINETIC RATIO = 100.7 %

EMISSIONS
 Probe/Impinger 1 Concentration (NH4) = 0.077 mg/l
 Volume (NH3) = 3.09E-05 l
 Concentration (NH3) = 0.03 ppm
 Impinger 2&3 Concentration (NH4) = 0.052 mg/l
 Volume (NH3) = 1.74E-05 l
 Concentration (NH3) = 0.02 ppm

Total Volume (NH3) = 4.82E-05 l
 Total Concentration (NH3) = 0.04 ppm
 Total Concentration (NH3) @ 3% O2 = 0.06 ppm
 Emission Rate (NH3) = 2.80E-05 lb/mmBtu
 Emission Rate (NH3) = 0.11 lb/hr

CATALYST AIR MANAGEMENT, INC.

Air Quality Testing Services
2505 Byington-Solway Road
Knoxville, TN 37931

(865) 531-0075
(865) 531-0750 Fax

Field Isokinetic Data Sheet

Client Lakeford
Plant McIntosh
Location Stack 03
Test CTM 027
Run 1
Date 2/10/10
Meter Box 013
 ΔH 1.79 | Y1 1.02

Pitot No. CAM-110
Nozzle No. 200
Nozzle Dn. .185
TC No. 16
 P_b 29.85
Ambient Temp 63°F
Static -.6"

Filter Number N/A
Initial Leak (Samp.) 0.010 @ 9"
Initial Leak (Pitot) OK @ 6"
OK @ 7"
Final Leak (Samp.) 0.008 @ 8"
Final Leak (Pitot) OK @ 6.5"
OK @ 7"

$K = 0.97$

POINT	TIME		METER	ΔP	Δh	STACK °F	PROBE° F	OVEN °F	METER °F		EXIT °F	VAC
	ACTUAL	RUN							IN	OUT		
i	1150	0	238.306					N/A				
A 1		2.5	240.0	1.6	1.5	136	141		50	50	57	4.5
2		5	241.7	1.6	1.5	138	141		50	50	53	4.5
3		7.5	243.4	1.6	1.5	138	140		52	52	51	4.5
4		10	245.1	1.6	1.5	138	142		53	52	52	4.5
5		12.5	246.7	1.5	1.4	137	141		53	50	51	4.5
6	1207	15	248.312	1.3	1.2	134	140		54	52	51	4
	1211		248.312									
B 1		17.5	249.9	1.4	1.3	138	140		54	53	52	4
2		20	251.5	1.5	1.4	138	140		54	53	50	4
3		22.5	253.1	1.4	1.3	138	140		54	53	50	4
4		25	254.7	1.4	1.3	137	141		55	53	50	4
5		27.5	256.3	1.3	1.2	137	141		55	53	51	3.5
6	1226	30	257.699	1.1	1.0	135	140		55	53	51	3
	1230		257.699									
C 1		32.5	259.13	1.4	1.3	134	139		55	54	51	4
2		35	260.9	1.4	1.3	136	142		56	54	49	4
3		37.5	262.5	1.5	1.4	137	140		56	54	48	4.5
4		40	264.1	1.5	1.4	138	141		57	55	48	4.5
5		42.5	265.8	1.5	1.4	138	140		57	55	48	4.5
6	1245	45	267.163	1.1	1.0	134	140		58	55	48	3.5
	1249		267.163									
D 1		47.5	268.7	1.5	1.4	136	141		58	56	50	6
2		50	270.3	1.5	1.4	137	140		58	56	49	6
3		52.5	271.9	1.4	1.3	138	140		58	57	49	6
4		55	273.6	1.5	1.4	138	141		59	57	49	6.5
5		57.5	275.2	1.5	1.4	138	139		59	57	48	6.5
6	1304	60	276.743	1.3	1.2	133	141		60	57	49	6

COMMENTS:

A O₂ - 6.4 D O₂ - 6.6 C O₂ - 6.5 D O₂ - 6.6
CO₂ - 11.8 CO₂ - 11.8 CO₂ - 11.7 CO₂ - 11.8

CATALYST AIR MANAGEMENT, INC.

(865) 531-0075

Air Quality Testing Services

(865) 531-0750 Fax

2505 Byington-Solway Road
Knoxville, TN 37931

PLANT: McIntosh DATE: 2/10/10
 SAMPLING TIME: (24 HR CLOCK) 1152-1304
 SAMPLING LOCATION: 3 Stack
 SAMPLING TYPE: Integrated Bag
 ANALYTICAL METHOD: 31027 AMB. TEMP (°F) 63
 TECHNICIAN: Urban Love

Pl 1
NH3

RUN GAS	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO_2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO ₂							11.8		
O ₂ <small>(NET IS ACTUAL MINUS ACTUAL CO₂)</small>							6.6	Fuel Type COAL RESIDUAL FUEL OIL NATURAL GAS	Fo (calc) 1.289 1.716

SYSTEM LEAK CHECK pl NA instructed
 INITIAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) 1 BUBBLER
 FINAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) 1 BUBBLER

MOISTURE

	1	2	3	4	5	6	GEL	TOTALS
FINAL (ml)	840.7	738.9	757.2				855.8	
INITIAL (ml)	803.4	722.2	746.6				856.0	
NET (ml)	37.3	16.6	10.6				19.8	84.3
TOTALS								84.3

PARTICULATE CATCH

FILTER WEIGHTS

PROBE/NOZZLE WASH

FILTER NO.				WEIGHED BY	BEAKER NO.				WEIGHED BY
FINAL WEIGHT					FINAL WEIGHT				
INITIAL WEIGHT					INITIAL WEIGHT				
DIFFERENCE					DIFFERENCE				
PARTICULATE CATCH					PARTICULATE CATCH				

TOTAL PARTICULATE CATCH (mg) _____

CATALYST AIR MANAGEMENT, INC.

(865) 531-0075

Air Quality Testing Services

(865) 531-0750 Fax

2505 Byington-Solway Road

Knoxville, TN 37931

Field Isokinetic Data Sheet

Client Lakeland
 Plant McIntosh
 Location Stack U3
 Test CTM 022
 Run 2
 Date 2/10/10
 Meter Box 613
 ΔH 1.79 | Y1.02

Pitot No. CAM-110
 Nozzle No. 200
 Nozzle Dn. .185
 TC No. 16
 P_B 29.85
 Ambient Temp 63°F
 Static -.6"

Filter Number N/A
 Initial Leak (Samp.) 0.010 @ 9"
 Initial Leak (Pitot) + OK @ 6.5"
- OK @ 7"
 Final Leak (Samp.) 0.010 @ 10"
 Final Leak (Pitot) + OK @ 5.5"
- OK @ 5.5"

K-092

POINT	TIME		METER	ΔP	Δh	STACK °F	PROBE °F	OVEN °F	METER °F		EXIT °F	VAC
	ACTUAL	RUN							IN	OUT		
	1318	0	277.283					N/A				
D1		2.5	279.0	1.6	1.5	135	138		59	58	58	3.5
2		5	280.7	1.5	1.4	138	140		59	58	56	3
3		7.5	282.3	1.6	1.5	139	141		59	58	55	3.5
4		10	283.9	1.5	1.4	138	140		59	58	56	3
5		12.5	285.5	1.5	1.4	138	140		60	58	52	3
6	1333	15	287.132	1.4	1.3	137	141		60	59	52	3
	1336		287.132									
C1		17.5	288.7	1.4	1.3	137	140		60	59	55	3
2		20	290.3	1.4	1.3	139	140		60	59	50	3
3		22.5	291.9	1.5	1.4	138	140		60	59	50	3
4		25	293.5	1.5	1.4	137	141		60	59	49	3
5		27.5	295.1	1.5	1.4	138	140		61	59	50	3
6	1351	30	296.688	1.3	1.2	135	140		61	59	50	3
	1355		296.688									
B1		32.5	298.3	1.5	1.4	137	141		61	59	53	3.5
2		35	299.9	1.5	1.4	138	140		61	60	50	3.5
3		37.5	301.6	1.5	1.4	138	142		62	60	49	3.5
4		40	303.2	1.4	1.3	137	141		63	60	49	3.5
5		42.5	304.8	1.5	1.4	139	140		63	60	49	3.5
6	1410	45	306.318	1.2	1.1	138	140		64	61	50	3
	1413		306.318									
A1		47.5	307.9	1.5	1.4	139	140		62	61	51	3.5
2		50	309.7	1.6	1.5	139	141		63	61	49	3.5
3		52.5	311.3	1.4	1.5	138	141		64	61	50	3.5
4		55	313.1	1.7	1.6	139	141		64	61	49	4
5		57.5	314.7	1.5	1.4	138	141		64	62	50	3.5
6	1428	60	316.318	1.4	1.3	134	140		65	62	50	3.5

COMMENTS:

A) O₂ - 6.7 B) O₂ - 6.7 C) O₂ - 6.6 D) O₂ - 6.8
 CO₂ - 11.5 CO₂ - 11.8 CO₂ - 12.0 CO₂ - 11.8

PLANT: McIntosh DATE: 2/10/10
 SAMPLING TIME: (24 HR CLOCK) 1318 - 1426
 SAMPLING LOCATION: 3 Stack
 SAMPLING TYPE: Integrated Bag
 ANALYTICAL METHOD: 31027 AMB. TEMP (°F) 63
 TECHNICIAN: Urban / Love

Rn 2
NH3

GAS	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO_2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO ₂							11.5		
O ₂ (NET IS ACTUAL MINUS ACTUAL CO ₂)							6.7	Fuel Type	Fo (calc)
								COAL	1.280
								RESIDUAL FUEL OIL	1.716
								NATURAL GAS	

SYSTEM LEAK CHECK of NA instructed
 INITIAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) 1 BUBBLER
 FINAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) 1 BUBBLER

MOISTURE

	1	2	3	4	5	6	GEL	TOTALS
FINAL (ml)	749.0	722.1	757.0				866.1	
INITIAL (ml)	715.6	703.5	742.5				852.1	
NET (ml)	33.4	18.6	14.5				14.0	80.5
TOTALS								80.5

PARTICULATE CATCH

FILTER WEIGHTS				PROBE/NOZZLE WASH			
FILTER NO.			WEIGHED BY	BEAKER NO.			WEIGHED BY
FINAL WEIGHT				FINAL WEIGHT			
INITIAL WEIGHT				INITIAL WEIGHT			
DIFFERENCE				DIFFERENCE			
PARTICULATE CATCH				PARTICULATE CATCH			

TOTAL PARTICULATE CATCH (mg) _____

CATALYST AIR MANAGEMENT, INC.

Air Quality Testing Services
2505 Byington-Solway Road
Knoxville, TN 37931

(865) 531-0075

(865) 531-0750 Fax

Field Isokinetic Data Sheet

Client	<u>Lakeland</u>	Pitot No.	<u>CAM-110</u>	Filter Number	<u>N/A</u>
Plant	<u>McIntosh</u>	Nozzle No.	<u>200</u>	Initial Leak (Samp.)	<u>0.010 @ 9"</u>
Location	<u>Stark V-3</u>	Nozzle Dn.	<u>.185</u>	Initial Leak (Pitot)	<u>+ OK @ 5.5"</u>
Test	<u>CTM-027</u>	TC No.	<u>16</u>		<u>- OK @ 5.5"</u>
Run	<u>3</u>	P _B	<u>29.85</u>	Final Leak (Samp.)	<u>0.008 @ 9"</u>
Date	<u>2/10/10</u>	Ambient Temp	<u>62°F</u>	Final Leak (Pitot)	<u>+ OK @ 6"</u>
Meter Box	<u>013</u>	Static	<u>-.6"</u>		<u>- OK @ 5"</u>
ΔH	<u>1.79</u> <u>Y₁ 1.02</u>				

$K = 0.92$

POINT	TIME	ACTUAL RUN	METER	ΔP	Δh	STACK °F	PROBE °F	OVEN °F	METER IN °F	METER OUT °F	EXIT °F	VAC
		1443	0					N/A				
A 1		2.5	318.3	1.5	1.4	139	140		64	63	56	3.0
2		5	319.8	1.5	1.4	139	140		64	63	52	3.0
3		7.5	321.5	1.4	1.3	139	141		64	63	51	3.0
4		10	323.1	1.4	1.3	138	140		65	63	50	3.0
5		12.5	324.7	1.4	1.3	138	140		65	63	50	3.0
6	1458	15	326.203	1.3	1.2	138	140		65	63	51	2.5
		1502	326.203									
B 1		17.5	327.8	1.5	1.4	140	140		64	62	54	3.0
2		20	329.4	1.5	1.4	140	141		64	62	52	3.0
3		22.5	331.0	1.4	1.3	140	141		65	62	52	2.5
4		25	332.7	1.5	1.4	139	140		65	62	51	2.5
5		27.5	334.3	1.4	1.3	140	139		65	62	52	2.5
6	1517	30	335.747	1.2	1.1	137	140		65	62	51	2
		1521	335.747									
C 1		32.5	337.3	1.4	1.3	138	141		64	63	53	2.5
2		35	339.0	1.5	1.4	139	141		65	63	51	2.5
3		37.5	340.6	1.5	1.4	139	140		65	63	50	2.5
4		40	342.2	1.5	1.4	138	142		65	63	50	2.5
5		42.5	343.9	1.5	1.4	139	140		66	63	51	3
6	1536	45	345.442	1.3	1.2	136	141		66	63	51	2.5
		1540	345.442									
D 1		47.5	347.1	1.6	1.5	137	139		64	63	54	3
2		50	348.8	1.6	1.5	139	142		65	63	52	3
3		52.5	350.5	1.5	1.4	140	141		65	63	51	2.5
4		55	352.1	1.5	1.4	139	140		65	63	50	2.5
5		57.5	353.8	1.5	1.4	139	140		66	63	50	2.5
6	1555	60	355.420	1.4	1.3	136	140		66	63	50	

COMMENTS:

A) O₂ - 6.8 B) O₂ - 6.7 C) O₂ - 6.7 D) O₂ - 6.7
 CO₂ - 12.0 CO₂ - 11.7 CO₂ - 11.8 CO₂ - 11.7

PLANT: McIntosh DATE: 2/10/10
 SAMPLING TIME: (24 HR CLOCK) 1443-1555
 SAMPLING LOCATION: 3 Stack
 SAMPLING TYPE: Integrated By
 ANALYTICAL METHOD: 3/027 AMB. TEMP (°F) 62
 TECHNICIAN: Uabul Luv

Rm 3
NH3

RUN GAS	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO_2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO ₂							11.8		
O ₂ <small>(NET IS ACTUAL MINUS ACTUAL CO₂)</small>							6.7	Fuel Type COAL RESIDUAL FUEL OIL NATURAL GAS	Fo (calc) 1.280 1.716

SYSTEM LEAK CHECK al NA instructed
 INITIAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) / BUBBLER
 FINAL ORSAT ANALYZER LEAK CHECK (FLUID LEVEL) / BUBBLER

MOISTURE

	1	2	3	4	5	6	GEL	TOTALS
FINAL (ml)	790.2	776.9	759.5				898.4	
INITIAL (ml)	750.6	759.9	747.6				882.3	
NET (ml)	39.6	17.0	11.9				16.1	84.6
TOTALS								84.6

PARTICULATE CATCH

FILTER WEIGHTS				PROBE/NOZZLE WASH			
FILTER NO.			WEIGHED BY	BEAKER NO.			WEIGHED BY
FINAL WEIGHT				FINAL WEIGHT			
INITIAL WEIGHT				INITIAL WEIGHT			
DIFFERENCE				DIFFERENCE			
PARTICULATE CATCH				PARTICULATE CATCH			

TOTAL PARTICULATE CATCH (mg) _____

APPENDIX 2
TEST RESULTS – SO₃

February 1, 2010

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **1** Date: **2/1/10** Start Time: **10:35**
 End Time: **11:35**

BAROMETRIC PRESSURE: 29.96 P_{bar} VOLUME OF MOISTURE: 76.1 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.	
		519.327										
	10.0	524.1	0.75	63	62	349	503	190				
	10.0	528.9	0.75	64	62	355	504	186	13.3	6.1	-0.58	
	10.0	533.8	0.75	66	62	353	505	192				
	10.0	538.6	0.75	68	63	352	498	192				
	10.0	543.4	0.75	69	64	351	496	191				
	10.0	548.273	0.75	70	64	350	498	188				

RESULT	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.946	0.750	65	13.3	6.1	-0.58
	net	net	avg	avg	avg	avg	avg

$P_s = 29.92$ $V_{m(std)} = 29.790$ $V_{w(std)} = 3.584$ $\%M = 10.74$
 $B_{ws} = 0.107$ $M_d = 30.37$ $M_s = 29.04$

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.559	0.677	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **2** Date: **2/1/10** Start Time: **13:10**
 End Time: **14:10**

BAROMETRIC PRESSURE: **29.96** P_{bar} VOLUME OF MOISTURE: **79.6** V_{lc}
 GAS METER Y-FACTOR: **1.02** Y PITOT COEFFICIENT: **0.84** C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		549.380									
	10.0	554.2	0.75	66	64	353	504	190			
	10.0	559.1	0.75	67	64	353	501	188	13.2	6.0	-0.60
	10.0	563.9	0.75	68	65	354	498	186			
	10.0	568.7	0.75	70	66	353	496	191			
	10.0	573.6	0.75	70	66	354	501	190			
	10.0	578.466	0.75	71	67	353	504	191			

RESULT:	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.086	0.750	67	13.2	6.0	-0.60
	net	net	avg	avg	avg	avg	avg

P_s = 29.92 V_{m(std)} = 29.807 V_{w(std)} = 3.749 %M = 11.17
 B_{ws} = 0.112 M_d = 30.35 M_s = 28.97

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.801	0.962	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric
 Unit Tested: McIntosh Unit 3
 Sampling Location: Stack

Run No: 3 Date: 2/1/10 Start Time: 15:43
 End Time: 16:43

BAROMETRIC PRESSURE: 29.96 P_{bar} VOLUME OF MOISTURE: 80.6 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		579.157									
	10.0	584.0	0.75	67	65	354	497	187			
	10.0	588.8	0.75	69	66	350	504	188	13.1	6.1	-0.55
	10.0	593.7	0.75	70	66	350	496	186			
	10.0	598.5	0.75	71	68	351	497	192			
	10.0	603.4	0.75	72	68	352	499	194			
	10.0	608.213	0.75	73	70	353	496	186			

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.056	0.750	69	13.1	6.1	-0.55
	net	net	avg	avg	avg	avg	avg

P_s = 29.92 V_{m(std)} = 29.677 V_{w(std)} = 3.796 %M = 11.34
 B_{ws} = 0.113 M_d = 30.34 M_s = 28.94

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	1.098	1.328	0.002

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: 4 Date: 2/1/10 Start Time: 17:56
 End Time: 18:56

BAROMETRIC PRESSURE: 29.96 P_{bar} VOLUME OF MOISTURE: 73.7 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		609.312									
	10.0	614.2	0.75	71	70	352	498	184			
	10.0	619.1	0.75	71	70	353	504	188	13.2	6.0	-0.58
	10.0	623.9	0.75	71	69	351	506	190			
	10.0	628.7	0.75	72	69	350	495	190			
	10.0	633.6	0.75	73	69	351	504	194			
	10.0	638.471	0.75	73	70	354	500	191			
RESULT:	TT	VM	PM		TM				CO2	O2	Static
	60.0	29.159	0.750		71				13.2	6.0	-0.58
	net	net	avg		avg				avg	avg	avg
	$P_s =$	29.92		$V_{m(std)} =$	29.675		$V_{w(std)} =$	3.471		$\%M =$	10.47
	$B_{ws} =$	0.105		$M_d =$	30.35		$M_s =$	29.06			

EMISSIONS

Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 1.006	1.208	0.002

February 2, 2010

Catalyst Air Management, Inc.
 EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric
 Unit Tested: McIntosh Unit 3
 Sampling Location: Stack

Run No: 5 Date: 2/2/10 Start Time: 6:35
 End Time: 7:35

BAROMETRIC PRESSURE: 29.74 P_{bar} VOLUME OF MOISTURE: 84.3 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.	
		638.764										
	10.0	643.7	0.75	72	69	354	503	185				
	10.0	648.5	0.75	71	69	355	503	187	12.7	6.1	-0.50	
	10.0	653.4	0.75	72	69	352	505	186				
	10.0	658.3	0.75	73	70	353	502	187				
	10.0	663.2	0.75	74	70	350	496	188				
	10.0	668.044	0.75	75	71	350	504	188				

RESULT:	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.280	0.750	71	12.7	6.1	-0.50
	net	net	avg	avg	avg	avg	avg

P_s = 29.70 V_{m(std)} = 29.547 V_{w(std)} = 3.971 %M = 11.85
 B_{ws} = 0.118 M_d = 30.28 M_s = 28.82

EMISSIONS		
Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 0.342	0.414	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **6** Date: **2/2/10** Start Time: **9:02**
 End Time: **10:02**

BAROMETRIC PRESSURE: **29.74** P_{bar} VOLUME OF MOISTURE: **82.4** V_{ic}
 GAS METER Y-FACTOR: **1.02** Y PITOT COEFFICIENT: **0.84** C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		670.497									
	10.0	675.4	0.75	73	71		498	186			
	10.0	680.3	0.75	73	71		502	190	12.9	6.0	-0.50
	10.0	685.1	0.75	74	71		503	192			
	10.0	690.0	0.75	75	72		499	194			
	10.0	695.0	0.75	76	73		505	189			
	10.0	699.916	0.75	76	73		503	188			

RESULT:	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.419	0.750	73	12.9	6.0	-0.50
	net	net	avg	avg	avg	avg	avg

$P_s =$ 29.70 $V_{m(std)} =$ 29.581 $V_{w(std)} =$ 3.881 %M= 11.60
 $B_{ws} =$ 0.116 $M_d =$ 30.30 $M_s =$ 28.88

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.420	0.505	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: 7 Date: 2/2/10 Start Time: 15:05
 End Time: 16:05

BAROMETRIC PRESSURE: 29.74 P_{bar} VOLUME OF MOISTURE: 83.3 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS	PM	METER TEMP		PROBE	OVEN	COIL	CO2%	O2%	STATIC PRESS.
		METER	ORIFICE	IN	OUT	TEMP	TEMP	TEMP			
		702.453									
	10.0	707.2	0.75	69	68	351	495	186			
	10.0	712.1	0.75	70	68	353	495	186	11.8	6.7	-0.50
	10.0	716.9	0.75	72	69	352	497	188			
	10.0	721.7	0.75	74	70	352	504	87			
	10.0	726.5	0.75	74	71	354	496	187			
	10.0	731.448	0.75	74	71	350	494	188			
RESULT:	TT	VM	PM	TM					CO2	O2	Static
	60.0	28.995	0.750	71					11.8	6.7	-0.50
	net	net	avg	avg					avg	avg	avg

P_s = 29.70 V_{m(std)} = 29.283 V_{w(std)} = 3.923 %M = 11.82
 B_{ws} = 0.118 M_d = 30.16 M_s = 28.72

EMISSIONS

Concentration (ppm) Concentration (ppm @ 3% O2) Emission Rate (lb/mmBtu)
 SO3 1.059 0.907 0.002

Catalyst Air Management, Inc.

EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **8** Date: **2/2/10** Start Time: **17:30**
 End Time: **18:30**

BAROMETRIC PRESSURE: **29.74** P_{bar} VOLUME OF MOISTURE: **86.8** V_{lc}
 GAS METER Y-FACTOR: **1.02** Y PITOT COEFFICIENT: **0.84** C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	PROBE TEMP OUT	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		732.573								
	10.0	737.4	0.75	69	68	354	495			
	10.0	742.3	0.75	70	68	355	502	11.5	6.7	-0.50
	10.0	747.2	0.75	71	69	350	500			
	10.0	752.0	0.75	71	68	354	508			
	10.0	756.7	0.75	72	69	351	497			
	10.0	761.592	0.75	71	69	354	506			

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.019	0.750	70	11.5	6.7	-0.50
	net	net	avg	avg	avg	avg	avg

$P_s =$ 29.70 $V_{m(std)} =$ 29.376 $V_{w(std)} =$ 4.088 %M = 12.22
 $B_{ws} =$ 0.122 $M_d =$ 30.11 $M_s =$ 28.63

EMISSIONS

Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 1.151	0.986	0.002

Catalyst Air Management, Inc.
 EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric
 Unit Tested: McIntosh Unit 3
 Sampling Location: Stack

Run No: 9 Date: 2/2/10 Start Time: 19:44
 End Time: 20:44

BAROMETRIC PRESSURE: 29.74 P_{bar} VOLUME OF MOISTURE: 68.5 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	PROBE TEMP OUT	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		762.031								
	10.0	766.9	0.75	67	66	351	511			
	10.0	771.7	0.75	66	65	353	497	11.7	6.7	-0.50
	10.0	776.6	0.75	66	65	351	502			
	10.0	781.4	0.75	67	65	349	502			
	10.0	786.1	0.75	67	64	352	505			
	10.0	790.984	0.75	68	65	350	497			

RESULT:	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.953	0.750	66	11.7	6.7	-0.50
	net	net	avg	avg	avg	avg	avg

$P_s =$ 29.70 $V_{m(std)} =$ 29.514 $V_{w(std)} =$ 3.226 $\%M =$ 9.85
 $B_{ws} =$ 0.099 $M_d =$ 30.14 $M_s =$ 28.94

EMISSIONS

Concentration (ppm) Concentration (ppm @ 3% O2) Emission Rate (lb/mmBtu)
 SO3 0.980 0.839 0.002

February 3, 2010

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **12** Date: **2/3/10** Start Time: **17:25**
 End Time: **18:25**

BAROMETRIC PRESSURE: 29.99 P_{bar} VOLUME OF MOISTURE: 100 V_{lc}
 GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	PROBE OUT	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		850.529								
	10.0	855.3	0.75	66	66	346	508			
	10.0	860.1	0.75	66	66	347	503	12.8	6.7	-0.65
	10.0	865.0	0.75	66	66	346	502			
	10.0	869.8	0.75	66	65	351	501			
	10.0	874.6	0.75	66	65	352	498			
	10.0	879.405	0.75	67	65	348	506			

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.876	0.750	66	12.8	6.7	-0.65
	net	net	avg	avg	avg	avg	avg

P_s = 29.94 V_{m(std)} = 29.687 V_{w(std)} = 4.710 %M = 13.69
 B_{ws} = 0.137 M_d = 30.32 M_s = 28.63

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.961	1.212	0.002

February 8, 2010

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Unit 3 Stack**

Run No: **13** Date: **2/8/10** Start Time: **8:30**
 End Time: **9:30**

BAROMETRIC PRESSURE: **29.90** P_{bar} VOLUME OF MOISTURE: **76** V_{lc}
 GAS METER Y-FACTOR: **1.02** Y PITOT COEFFICIENT: **0.84** C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP PROBE		OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.	
				IN	OUT						
		910.820									
	10.0	915.6	0.75	50	49	360	495	168			
	10.0	920.3	0.75	51	50	356	507	179	11.5	7.5	-0.50
	10.0	925.1	0.75	54	50	349	505	184			
	10.0	929.8	0.75	56	52	356	504	178			
	10.0	934.6	0.75	57	53	353	497	183			
	10.0	939.412	0.75	59	54	354	498	183			

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.592	0.750	53	11.5	7.5	-0.50
	net	net	avg	avg	avg	avg	avg

$P_s =$ 29.86 $V_{m(std)} =$ 30.045 $V_{w(std)} =$ 3.580 %M = 10.65
 $B_{ws} =$ 0.106 $M_d =$ 30.14 $M_s =$ 28.85

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.328	0.438	0.001

Catalyst Air Management, Inc.

EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric

Unit Tested: McIntosh Unit 3

Sampling Location: Unit 3 Stack

Run No: 15

Date: 2/8/10

Start Time: 12:20

End Time: 13:20

BAROMETRIC PRESSURE: 29.90 P_{bar}
 GAS METER Y-FACTOR: 1.02 Y

VOLUME OF MOISTURE: 81 V_{lc}
 PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.	
		969.175										
	10.0	974.0	0.75	68	67	348	499	181				
	10.0	978.8	0.75	69	68	356	499	191	11.6	7.8	-0.50	
	10.0	983.7	0.75	71	68	352	496	180				
	10.0	988.5	0.75	72	69	353	505	181				
	10.0	993.3	0.75	74	70	349	505	186				
	10.0	998.211	0.75	75	71	354	507	184				

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	29.036	0.750	70	11.6	7.8	-0.50
	net	net	avg	avg	avg	avg	avg

$P_s = 29.86$ $V_{m(std)} = 29.519$ $V_{w(std)} = 3.815$ %M = 11.45
 $B_{ws} = 0.114$ $M_d = 30.17$ $M_s = 28.78$

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.503	0.687	0.001

February 9, 2010

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric
Unit Tested: McIntosh Unit 3
Sampling Location: Stack

Run No: 18 Date: 2/9/10 Start Time: 6:18
End Time: 7:18

BAROMETRIC PRESSURE: 29.75 P_{bar} VOLUME OF MOISTURE: 72 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		60.361									
	10.0	65.1	0.75	60	58	354	498	170			
	10.0	70.0	0.75	62	59	352	501	174	10.9	8.3	-0.60
	10.0	74.8	0.75	63	59	349	504	178			
	10.0	79.6	0.75	64	60	352	498	181			
	10.0	84.3	0.75	65	61	353	502	186			
	10.0	89.040	0.75	66	62	356	501	184			

RESULT:	TT	VM	PM		TM				CO2	O2	Static
	60.0	28.679	0.750		62				10.9	8.3	-0.60
	net	net	avg		avg				avg	avg	avg

$P_s =$ 29.71 $V_{m(std)} =$ 29.487 $V_{w(std)} =$ 3.391 $\%M =$ 10.31
 $B_{ws} =$ 0.103 $M_d =$ 30.08 $M_s =$ 28.83

EMISSIONS

Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 0.437	0.620	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: 19 Date: 2/9/10 Start Time: 8:05
 End Time: 9:05

BAROMETRIC PRESSURE: 29.75	P _{bar}	VOLUME OF MOISTURE: 73	V _{ic}
GAS METER Y-FACTOR: 1.02	Y	PITOT COEFFICIENT: 0.84	C _p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP		PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
				IN	OUT						
		89.809									
	10.0	94.6	0.75	64	62	350	494	174			
	10.0	99.4	0.75	64	62	357	500	180	10.8	8.5	-0.60
	10.0	104.1	0.75	65	62	354	502	180			
	10.0	108.9	0.75	66	63	351	501	182			
	10.0	113.7	0.75	67	64	353	499	185			
	10.0	118.386	0.75	68	64	347	503	183			

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.577	0.750	64	10.8	8.5	-0.60
	net	net	avg	avg	avg	avg	avg

P_s = 29.71 V_{m(std)} = 29.233 V_{w(std)} = 3.438 %M = 10.52
 B_{ws} = 0.105 M_d = 30.07 M_s = 28.80

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.545	0.787	0.001

Catalyst Air Management, Inc.
 EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: Lakeland Electric
 Unit Tested: McIntosh Unit 3
 Sampling Location: Stack

Run No: 21

Date: 2/9/10

Start Time: 11:40

End Time: 12:40

BAROMETRIC PRESSURE: 29.75 P_{bar}
 GAS METER Y-FACTOR: 1.02 Y

VOLUME OF MOISTURE: 75 V_{ic}
 PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		149.250									
	10.0	154.1	0.75	72	70	353	500	183			
	10.0	158.9	0.75	73	70	358	497	190	10.7	8.7	-0.55
	10.0	163.7	0.75	74	72	352	495	172			
	10.0	168.4	0.75	76	73	355	495	176			
	10.0	173.2	0.75	77	73	347	496	175			
	10.0	178.040	0.75	78	74	349	498	174			

RESULT:	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.790	0.750	74	10.7	8.7	-0.55
	net	net	avg	avg	avg	avg	avg

P_s = 29.71 V_{m(std)} = 28.940 V_{w(std)} = 3.533 %M = 10.88
 B_{ws} = 0.109 M_d = 30.06 M_s = 28.75

EMISSIONS

Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 0.527	0.773	0.001

Catalyst Air Management, Inc.
EPA Method 8A - Controlled Condensate SO3 Sample Sheet

Client: **Lakeland Electric**
 Unit Tested: **McIntosh Unit 3**
 Sampling Location: **Stack**

Run No: **22** Date: **2/9/10** Start Time: **13:25**
 End Time: **14:25**

BAROMETRIC PRESSURE: **29.75** P_{bar} VOLUME OF MOISTURE: **76** V_{lc}
 GAS METER Y-FACTOR: **1.02** **Y** PITOT COEFFICIENT: **0.84** C_p

POINT	TIME	GAS	PM	METER TEMP		PROBE	OVEN	COIL			STATIC PRESS.	
		METER	ORIFICE	IN	OUT	TEMP	TEMP	TEMP	CO2%	O2%		
		178.526										
	10.0	183.3	0.75	72	70	346	494	174				
	10.0	188.0	0.75	73	70	356	498	175	10.8	8.5	-0.60	
	10.0	192.8	0.75	74	71	346	500	181				
	10.0	197.6	0.75	75	71	354	505	184				
	10.0	202.4	0.75	75	71	352	499	181				
	10.0	207.268	0.75	76	72	352	499	172				

RESULTS	TT	VM	PM	TM	CO2	O2	Static
	60.0	28.742	0.750	73	10.8	8.5	-0.60
	net	net	avg	avg	avg	avg	avg

$P_s =$ 29.71 $V_{m(std)} =$ 28.946 $V_{w(std)} =$ 3.580 %M= 11.01
 $B_{ws} =$ 0.110 $M_d =$ 30.07 $M_s =$ 28.74

EMISSIONS

Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3 0.538	0.777	0.001

APPENDIX 3
PLANT OPERATING DATA

February 1, 2010.

Run 1	
Date/Time	MPP3 SO2#/MM Value
02/01/2010 10:35	
02/01/2010 10:36	
02/01/2010 10:37	
02/01/2010 10:38	
02/01/2010 10:39	
02/01/2010 10:40	0.850
02/01/2010 10:41	0.560
02/01/2010 10:42	0.498
02/01/2010 10:43	0.497
02/01/2010 10:44	0.528
02/01/2010 10:45	0.563
02/01/2010 10:46	0.596
02/01/2010 10:47	0.627
02/01/2010 10:48	0.661
02/01/2010 10:49	0.683
02/01/2010 10:50	
02/01/2010 10:51	
02/01/2010 10:52	
02/01/2010 10:53	
02/01/2010 10:54	
02/01/2010 10:55	0.510
02/01/2010 10:56	0.547
02/01/2010 10:57	0.585
02/01/2010 10:58	0.616
02/01/2010 10:59	0.634
02/01/2010 11:00	0.606
02/01/2010 11:01	0.582
02/01/2010 11:02	0.591
02/01/2010 11:03	0.608
02/01/2010 11:04	0.588
02/01/2010 11:05	
02/01/2010 11:06	
02/01/2010 11:07	
02/01/2010 11:08	
02/01/2010 11:09	
02/01/2010 11:10	0.606
02/01/2010 11:11	0.566
02/01/2010 11:12	0.567
02/01/2010 11:13	0.590
02/01/2010 11:14	0.610
02/01/2010 11:15	0.600
02/01/2010 11:16	0.575
02/01/2010 11:17	0.581
02/01/2010 11:18	0.569
02/01/2010 11:19	0.586
02/01/2010 11:20	
02/01/2010 11:21	
02/01/2010 11:22	
02/01/2010 11:23	
02/01/2010 11:24	
02/01/2010 11:25	0.592
02/01/2010 11:26	0.629
02/01/2010 11:27	0.646
02/01/2010 11:28	0.616
02/01/2010 11:29	0.584
02/01/2010 11:30	0.560
02/01/2010 11:31	0.540
02/01/2010 11:32	0.505
02/01/2010 11:33	0.506
02/01/2010 11:34	0.539
02/01/2010 11:35	

Run 2	
Date/Time	MPP3 SO2#/MM Value
02/01/2010 13:10	0.651
02/01/2010 13:11	0.622
02/01/2010 13:12	0.584
02/01/2010 13:13	0.554
02/01/2010 13:14	0.512
02/01/2010 13:15	0.479
02/01/2010 13:16	0.495
02/01/2010 13:17	0.530
02/01/2010 13:18	0.560
02/01/2010 13:19	0.587
02/01/2010 13:20	
02/01/2010 13:21	
02/01/2010 13:22	
02/01/2010 13:23	
02/01/2010 13:24	
02/01/2010 13:25	0.537
02/01/2010 13:26	0.572
02/01/2010 13:27	0.552
02/01/2010 13:28	0.526
02/01/2010 13:29	0.533
02/01/2010 13:30	0.556
02/01/2010 13:31	0.589
02/01/2010 13:32	0.612
02/01/2010 13:33	0.621
02/01/2010 13:34	0.586
02/01/2010 13:35	
02/01/2010 13:36	
02/01/2010 13:37	
02/01/2010 13:38	
02/01/2010 13:39	
02/01/2010 13:40	0.567
02/01/2010 13:41	0.546
02/01/2010 13:42	0.558
02/01/2010 13:43	0.576
02/01/2010 13:44	0.599
02/01/2010 13:45	0.601
02/01/2010 13:46	0.567
02/01/2010 13:47	0.534
02/01/2010 13:48	0.514
02/01/2010 13:49	0.527
02/01/2010 13:50	
02/01/2010 13:51	
02/01/2010 13:52	
02/01/2010 13:53	
02/01/2010 13:54	
02/01/2010 13:55	0.564
02/01/2010 13:56	0.585
02/01/2010 13:57	0.572
02/01/2010 13:58	0.540
02/01/2010 13:59	0.510
02/01/2010 14:00	0.501
02/01/2010 14:01	0.517
02/01/2010 14:02	0.546
02/01/2010 14:03	0.579
02/01/2010 14:04	0.621
02/01/2010 14:05	
02/01/2010 14:06	
02/01/2010 14:07	
02/01/2010 14:08	
02/01/2010 14:09	
02/01/2010 14:10	0.466

Run 3	
Date/Time	MPP3 SO2#/MM Value
02/01/2010 15:43	0.747
02/01/2010 15:44	0.767
02/01/2010 15:45	0.729
02/01/2010 15:46	0.685
02/01/2010 15:47	0.620
02/01/2010 15:48	0.558
02/01/2010 15:49	0.530
02/01/2010 15:50	
02/01/2010 15:51	
02/01/2010 15:52	
02/01/2010 15:53	
02/01/2010 15:54	
02/01/2010 15:55	0.725
02/01/2010 15:56	0.764
02/01/2010 15:57	0.778
02/01/2010 15:58	0.746
02/01/2010 15:59	0.662
02/01/2010 16:00	0.587
02/01/2010 16:01	0.549
02/01/2010 16:02	0.546
02/01/2010 16:03	0.579
02/01/2010 16:04	0.621
02/01/2010 16:05	
02/01/2010 16:06	
02/01/2010 16:07	
02/01/2010 16:08	
02/01/2010 16:09	
02/01/2010 16:10	0.656
02/01/2010 16:11	0.603
02/01/2010 16:12	0.556
02/01/2010 16:13	0.537
02/01/2010 16:14	0.554
02/01/2010 16:15	0.590
02/01/2010 16:16	0.632
02/01/2010 16:17	0.667
02/01/2010 16:18	0.711
02/01/2010 16:19	0.751
02/01/2010 16:20	
02/01/2010 16:21	
02/01/2010 16:22	
02/01/2010 16:23	
02/01/2010 16:24	
02/01/2010 16:25	0.536
02/01/2010 16:26	0.555
02/01/2010 16:27	0.580
02/01/2010 16:28	0.632
02/01/2010 16:29	0.672
02/01/2010 16:30	0.714
02/01/2010 16:31	0.764
02/01/2010 16:32	0.785
02/01/2010 16:33	0.745
02/01/2010 16:34	0.663
02/01/2010 16:35	
02/01/2010 16:36	
02/01/2010 16:37	
02/01/2010 16:38	
02/01/2010 16:39	
02/01/2010 16:40	0.626
02/01/2010 16:41	0.687
02/01/2010 16:42	0.730
02/01/2010 16:43	0.762

Run 4	
Date/Time	MPP3 SO2#/MM Value
02/01/2010 17:56	0.553
02/01/2010 17:57	0.558
02/01/2010 17:58	0.580
02/01/2010 17:59	0.624
02/01/2010 18:00	0.669
02/01/2010 18:01	0.711
02/01/2010 18:02	0.718
02/01/2010 18:03	0.682
02/01/2010 18:04	0.649
02/01/2010 18:05	
02/01/2010 18:06	
02/01/2010 18:07	
02/01/2010 18:08	
02/01/2010 18:09	
02/01/2010 18:10	0.634
02/01/2010 18:11	0.681
02/01/2010 18:12	0.734
02/01/2010 18:13	0.767
02/01/2010 18:14	0.774
02/01/2010 18:15	0.701
02/01/2010 18:16	0.816
02/01/2010 18:17	0.551
02/01/2010 18:18	0.527
02/01/2010 18:19	0.541
02/01/2010 18:20	
02/01/2010 18:21	
02/01/2010 18:22	
02/01/2010 18:23	
02/01/2010 18:24	
02/01/2010 18:25	0.787
02/01/2010 18:26	0.746
02/01/2010 18:27	0.859
02/01/2010 18:28	0.563
02/01/2010 18:29	0.511
02/01/2010 18:30	0.502
02/01/2010 18:31	0.515
02/01/2010 18:32	0.566
02/01/2010 18:33	0.610
02/01/2010 18:34	0.649
02/01/2010 18:35	
02/01/2010 18:36	
02/01/2010 18:37	
02/01/2010 18:38	
02/01/2010 18:39	
02/01/2010 18:40	0.630
02/01/2010 18:41	0.587
02/01/2010 18:42	0.557
02/01/2010 18:43	0.570
02/01/2010 18:44	0.604
02/01/2010 18:45	0.634
02/01/2010 18:46	0.666
02/01/2010 18:47	0.691
02/01/2010 18:48	0.662
02/01/2010 18:49	0.619
02/01/2010 18:50	
02/01/2010 18:51	
02/01/2010 18:52	
02/01/2010 18:53	
02/01/2010 18:54	
02/01/2010 18:55	0.611
02/01/2010 18:56	0.611

Invalid data: either a daily calibration check or a blowback period

Invalid data: calibration check or maintenance

Blowback Times 5
 15 minutes 20
 5 minutes BB 35
 50

Run 1

Coal Flow Coal Flow kpph
Total SUM 221.9372

Run 2

Coal Flow Coal Flow kpph
Total SUM 222.7064

Run 3

Coal Flow Coal Flow kpph
Total SUM 265.1233

Run 4

Coal Flow Coal Flow kpph
Total SUM 265.2815

Run 1	
Coal Flow 31	Coal Flow kpph

2/1/2010 10:35	54.05
2/1/2010 10:36	54.05
2/1/2010 10:37	54.05
2/1/2010 10:38	54.05
2/1/2010 10:39	54.05
2/1/2010 10:40	54.05
2/1/2010 10:41	54.05
2/1/2010 10:42	54.18
2/1/2010 10:43	54.56
2/1/2010 10:44	54.49
2/1/2010 10:45	54.29
2/1/2010 10:46	54.3
2/1/2010 10:47	54.31
2/1/2010 10:48	54.32
2/1/2010 10:49	54.42
2/1/2010 10:50	54.59
2/1/2010 10:51	54.34
2/1/2010 10:52	54.19
2/1/2010 10:53	54.15
2/1/2010 10:54	54.44
2/1/2010 10:55	54.58
2/1/2010 10:56	54.26
2/1/2010 10:57	54.02
2/1/2010 10:58	53.94
2/1/2010 10:59	53.75
2/1/2010 11:00	53.76
2/1/2010 11:01	53.84
2/1/2010 11:02	54.06
2/1/2010 11:03	53.98
2/1/2010 11:04	53.85
2/1/2010 11:05	54.06
2/1/2010 11:06	53.98
2/1/2010 11:07	53.79
2/1/2010 11:08	53.93
2/1/2010 11:09	54.06
2/1/2010 11:10	54.09
2/1/2010 11:11	53.91
2/1/2010 11:12	54.02
2/1/2010 11:13	54.11
2/1/2010 11:14	54.1
2/1/2010 11:15	54.1
2/1/2010 11:16	54.1
2/1/2010 11:17	54.1
2/1/2010 11:18	54.1
2/1/2010 11:19	54.1
2/1/2010 11:20	54.1
2/1/2010 11:21	54.17
2/1/2010 11:22	54.37
2/1/2010 11:23	54.39
2/1/2010 11:24	54.4
2/1/2010 11:25	54.35
2/1/2010 11:26	54.16
2/1/2010 11:27	54.09
2/1/2010 11:28	53.89
2/1/2010 11:29	53.98
2/1/2010 11:30	54.26
2/1/2010 11:31	54.36
2/1/2010 11:32	54.53
2/1/2010 11:33	54.32
2/1/2010 11:34	54.32
2/1/2010 11:35	54.25
Average	54.15508197

Run 2	
Coal Flow 31	Coal Flow kpph

2/1/2010 13:10	54.21
2/1/2010 13:11	54.21
2/1/2010 13:12	54.21
2/1/2010 13:13	54.13
2/1/2010 13:14	54.01
2/1/2010 13:15	54.24
2/1/2010 13:16	54.2
2/1/2010 13:17	54.24
2/1/2010 13:18	54.43
2/1/2010 13:19	54.42
2/1/2010 13:20	54.41
2/1/2010 13:21	54.35
2/1/2010 13:22	54.19
2/1/2010 13:23	54.25
2/1/2010 13:24	54.31
2/1/2010 13:25	54.27
2/1/2010 13:26	54.12
2/1/2010 13:27	54.34
2/1/2010 13:28	54.4
2/1/2010 13:29	54.59
2/1/2010 13:30	54.47
2/1/2010 13:31	54.38
2/1/2010 13:32	54.3
2/1/2010 13:33	54.02
2/1/2010 13:34	53.89
2/1/2010 13:35	54.14
2/1/2010 13:36	54.25
2/1/2010 13:37	53.97
2/1/2010 13:38	53.84
2/1/2010 13:39	54.14
2/1/2010 13:40	54.35
2/1/2010 13:41	54.32
2/1/2010 13:42	54.29
2/1/2010 13:43	54.26
2/1/2010 13:44	54.16
2/1/2010 13:45	53.99
2/1/2010 13:46	54.01
2/1/2010 13:47	53.91
2/1/2010 13:48	54.25
2/1/2010 13:49	54.63
2/1/2010 13:50	54.54
2/1/2010 13:51	54.3
2/1/2010 13:52	54.36
2/1/2010 13:53	54.47
2/1/2010 13:54	54.27
2/1/2010 13:55	54.2
2/1/2010 13:56	54.08
2/1/2010 13:57	54.18
2/1/2010 13:58	53.97
2/1/2010 13:59	54.17
2/1/2010 14:00	54.17
2/1/2010 14:01	54.17
2/1/2010 14:02	54.18
2/1/2010 14:03	54.18
2/1/2010 14:04	54.18
2/1/2010 14:05	54.18
2/1/2010 14:06	54.31
2/1/2010 14:07	54.86
2/1/2010 14:08	54.59
2/1/2010 14:09	54.47
2/1/2010 14:10	54.7
Average	54.25295

Run 3	
Coal Flow 31	Coal Flow kpph

2/1/2010 15:43	65.18
2/1/2010 15:44	65.25
2/1/2010 15:45	65.48
2/1/2010 15:46	65.47
2/1/2010 15:47	65.39
2/1/2010 15:48	65.2
2/1/2010 15:49	65.26
2/1/2010 15:50	65.32
2/1/2010 15:51	65.29
2/1/2010 15:52	65.08
2/1/2010 15:53	65.15
2/1/2010 15:54	65.31
2/1/2010 15:55	65.1
2/1/2010 15:56	64.76
2/1/2010 15:57	64.91
2/1/2010 15:58	64.74
2/1/2010 15:59	64.91
2/1/2010 16:00	64.71
2/1/2010 16:01	64.72
2/1/2010 16:02	64.74
2/1/2010 16:03	64.67
2/1/2010 16:04	64.56
2/1/2010 16:05	64.79
2/1/2010 16:06	64.81
2/1/2010 16:07	64.83
2/1/2010 16:08	64.86
2/1/2010 16:09	64.88
2/1/2010 16:10	64.82
2/1/2010 16:11	64.62
2/1/2010 16:12	64.62
2/1/2010 16:13	64.7
2/1/2010 16:14	64.98
2/1/2010 16:15	65.18
2/1/2010 16:16	65.08
2/1/2010 16:17	64.86
2/1/2010 16:18	64.85
2/1/2010 16:19	64.84
2/1/2010 16:20	64.83
2/1/2010 16:21	64.9
2/1/2010 16:22	65.04
2/1/2010 16:23	64.85
2/1/2010 16:24	64.77
2/1/2010 16:25	64.62
2/1/2010 16:26	64.8
2/1/2010 16:27	64.93
2/1/2010 16:28	64.92
2/1/2010 16:29	64.83
2/1/2010 16:30	64.72
2/1/2010 16:31	65.03
2/1/2010 16:32	65.08
2/1/2010 16:33	64.83
2/1/2010 16:34	64.63
2/1/2010 16:35	64.7
2/1/2010 16:36	64.97
2/1/2010 16:37	65.09
2/1/2010 16:38	64.89
2/1/2010 16:39	64.89
2/1/2010 16:40	64.79
2/1/2010 16:41	64.62
2/1/2010 16:42	64.89
2/1/2010 16:43	65.01
Average	64.92377

Run 4	
Coal Flow 31	Coal Flow kpph

2/1/2010 17:56	64.57
2/1/2010 17:57	64.57
2/1/2010 17:58	64.66
2/1/2010 17:59	64.98
2/1/2010 18:00	65.05
2/1/2010 18:01	64.74
2/1/2010 18:02	65.06
2/1/2010 18:03	65.27
2/1/2010 18:04	65.25
2/1/2010 18:05	65.17
2/1/2010 18:06	64.97
2/1/2010 18:07	64.93
2/1/2010 18:08	65.07
2/1/2010 18:09	65.34
2/1/2010 18:10	65.05
2/1/2010 18:11	65.16
2/1/2010 18:12	65.07
2/1/2010 18:13	65.2
2/1/2010 18:14	64.98
2/1/2010 18:15	64.91
2/1/2010 18:16	64.86
2/1/2010 18:17	64.57
2/1/2010 18:18	64.79
2/1/2010 18:19	64.82
2/1/2010 18:20	64.76
2/1/2010 18:21	64.66
2/1/2010 18:22	64.92
2/1/2010 18:23	64.9
2/1/2010 18:24	64.89
2/1/2010 18:25	64.88
2/1/2010 18:26	64.94
2/1/2010 18:27	65.12
2/1/2010 18:28	64.98
2/1/2010 18:29	64.73
2/1/2010 18:30	64.65
2/1/2010 18:31	64.51
2/1/2010 18:32	64.65
2/1/2010 18:33	64.83
2/1/2010 18:34	65.06
2/1/2010 18:35	65.12
2/1/2010 18:36	65.07
2/1/2010 18:37	65.02
2/1/2010 18:38	65.36
2/1/2010 18:39	65.13
2/1/2010 18:40	64.91
2/1/2010 18:41	64.83
2/1/2010 18:42	64.96
2/1/2010 18:43	64.73
2/1/2010 18:44	64.82
2/1/2010 18:45	65.1
2/1/2010 18:46	65.28
2/1/2010 18:47	65.19
2/1/2010 18:48	65.21
2/1/2010 18:49	65.35
2/1/2010 18:50	65.17
2/1/2010 18:51	65.12
2/1/2010 18:52	65.03
2/1/2010 18:53	65.17
2/1/2010 18:54	64.99
2/1/2010 18:55	64.91
2/1/2010 18:56	64.79
Average	64.96033

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/1/2010 10:35	55.81	2/1/2010 13:10	56.18	2/1/2010 15:43	67.03	2/1/2010 17:56	66.15
2/1/2010 10:36	56	2/1/2010 13:11	56.19	2/1/2010 15:44	67	2/1/2010 17:57	66.46
2/1/2010 10:37	56.25	2/1/2010 13:12	56.13	2/1/2010 15:45	66.94	2/1/2010 17:58	66.71
2/1/2010 10:38	55.92	2/1/2010 13:13	55.95	2/1/2010 15:46	67.08	2/1/2010 17:59	66.85
2/1/2010 10:39	55.7	2/1/2010 13:14	55.95	2/1/2010 15:47	67.01	2/1/2010 18:00	66.86
2/1/2010 10:40	55.81	2/1/2010 13:15	56.01	2/1/2010 15:48	66.93	2/1/2010 18:01	66.74
2/1/2010 10:41	55.92	2/1/2010 13:16	56.14	2/1/2010 15:49	67	2/1/2010 18:02	66.98
2/1/2010 10:42	56.16	2/1/2010 13:17	56.08	2/1/2010 15:50	67.22	2/1/2010 18:03	67.23
2/1/2010 10:43	56.56	2/1/2010 13:18	56.2	2/1/2010 15:51	66.97	2/1/2010 18:04	67.32
2/1/2010 10:44	56.3	2/1/2010 13:19	56.27	2/1/2010 15:52	66.81	2/1/2010 18:05	67.03
2/1/2010 10:45	56.12	2/1/2010 13:20	56.19	2/1/2010 15:53	66.9	2/1/2010 18:06	66.88
2/1/2010 10:46	56.17	2/1/2010 13:21	56.11	2/1/2010 15:54	66.92	2/1/2010 18:07	66.88
2/1/2010 10:47	56.23	2/1/2010 13:22	56.08	2/1/2010 15:55	66.75	2/1/2010 18:08	66.73
2/1/2010 10:48	56.28	2/1/2010 13:23	56.18	2/1/2010 15:56	66.75	2/1/2010 18:09	67.17
2/1/2010 10:49	56.33	2/1/2010 13:24	56.24	2/1/2010 15:57	66.89	2/1/2010 18:10	66.72
2/1/2010 10:50	56.31	2/1/2010 13:25	56.17	2/1/2010 15:58	66.53	2/1/2010 18:11	66.91
2/1/2010 10:51	56.04	2/1/2010 13:26	56.1	2/1/2010 15:59	66.89	2/1/2010 18:12	66.86
2/1/2010 10:52	55.84	2/1/2010 13:27	56.05	2/1/2010 16:00	66.69	2/1/2010 18:13	66.96
2/1/2010 10:53	55.86	2/1/2010 13:28	56.2	2/1/2010 16:01	66.49	2/1/2010 18:14	66.9
2/1/2010 10:54	55.88	2/1/2010 13:29	56.51	2/1/2010 16:02	66.65	2/1/2010 18:15	66.62
2/1/2010 10:55	55.85	2/1/2010 13:30	56.22	2/1/2010 16:03	66.4	2/1/2010 18:16	66.51
2/1/2010 10:56	55.68	2/1/2010 13:31	56.1	2/1/2010 16:04	66	2/1/2010 18:17	66.07
2/1/2010 10:57	55.59	2/1/2010 13:32	55.88	2/1/2010 16:05	66.24	2/1/2010 18:18	66.23
2/1/2010 10:58	55.64	2/1/2010 13:33	55.51	2/1/2010 16:06	66.83	2/1/2010 18:19	66.66
2/1/2010 10:59	55.39	2/1/2010 13:34	55.58	2/1/2010 16:07	66.82	2/1/2010 18:20	66.59
2/1/2010 11:00	55.29	2/1/2010 13:35	55.75	2/1/2010 16:08	66.62	2/1/2010 18:21	66.37
2/1/2010 11:01	55.57	2/1/2010 13:36	56	2/1/2010 16:09	66.67	2/1/2010 18:22	66.78
2/1/2010 11:02	55.6	2/1/2010 13:37	55.7	2/1/2010 16:10	66.61	2/1/2010 18:23	66.86
2/1/2010 11:03	55.63	2/1/2010 13:38	55.53	2/1/2010 16:11	66.39	2/1/2010 18:24	66.71
2/1/2010 11:04	55.71	2/1/2010 13:39	55.68	2/1/2010 16:12	66.41	2/1/2010 18:25	66.41
2/1/2010 11:05	55.83	2/1/2010 13:40	55.93	2/1/2010 16:13	66.56	2/1/2010 18:26	66.96
2/1/2010 11:06	55.61	2/1/2010 13:41	56.21	2/1/2010 16:14	66.94	2/1/2010 18:27	67.13
2/1/2010 11:07	55.51	2/1/2010 13:42	56.06	2/1/2010 16:15	66.97	2/1/2010 18:28	66.9
2/1/2010 11:08	55.76	2/1/2010 13:43	56.11	2/1/2010 16:16	66.7	2/1/2010 18:29	66.42
2/1/2010 11:09	55.91	2/1/2010 13:44	55.97	2/1/2010 16:17	66.56	2/1/2010 18:30	66.39
2/1/2010 11:10	55.77	2/1/2010 13:45	56.05	2/1/2010 16:18	66.75	2/1/2010 18:31	66.4
2/1/2010 11:11	55.76	2/1/2010 13:46	55.92	2/1/2010 16:19	66.83	2/1/2010 18:32	66.51
2/1/2010 11:12	56.02	2/1/2010 13:47	55.91	2/1/2010 16:20	66.63	2/1/2010 18:33	66.68
2/1/2010 11:13	55.87	2/1/2010 13:48	56.21	2/1/2010 16:21	66.64	2/1/2010 18:34	66.73
2/1/2010 11:14	55.8	2/1/2010 13:49	56.37	2/1/2010 16:22	66.98	2/1/2010 18:35	66.5
2/1/2010 11:15	55.94	2/1/2010 13:50	56.15	2/1/2010 16:23	66.79	2/1/2010 18:36	66.87
2/1/2010 11:16	55.93	2/1/2010 13:51	56.04	2/1/2010 16:24	66.54	2/1/2010 18:37	66.76
2/1/2010 11:17	55.74	2/1/2010 13:52	56.22	2/1/2010 16:25	66.43	2/1/2010 18:38	66.98
2/1/2010 11:18	56.07	2/1/2010 13:53	56.36	2/1/2010 16:26	66.9	2/1/2010 18:39	67.01
2/1/2010 11:19	56.07	2/1/2010 13:54	56.27	2/1/2010 16:27	66.92	2/1/2010 18:40	67.16
2/1/2010 11:20	56.07	2/1/2010 13:55	55.99	2/1/2010 16:28	66.94	2/1/2010 18:41	66.82
2/1/2010 11:21	56.08	2/1/2010 13:56	55.88	2/1/2010 16:29	66.76	2/1/2010 18:42	66.55
2/1/2010 11:22	56.1	2/1/2010 13:57	55.99	2/1/2010 16:30	66.4	2/1/2010 18:43	66.54
2/1/2010 11:23	56.17	2/1/2010 13:58	55.71	2/1/2010 16:31	66.82	2/1/2010 18:44	66.68
2/1/2010 11:24	56.3	2/1/2010 13:59	56.06	2/1/2010 16:32	66.83	2/1/2010 18:45	66.82
2/1/2010 11:25	56.18	2/1/2010 14:00	55.95	2/1/2010 16:33	66.45	2/1/2010 18:46	66.93
2/1/2010 11:26	56.11	2/1/2010 14:01	56.19	2/1/2010 16:34	66.17	2/1/2010 18:47	66.97
2/1/2010 11:27	56.04	2/1/2010 14:02	56.22	2/1/2010 16:35	66.31	2/1/2010 18:48	67
2/1/2010 11:28	55.62	2/1/2010 14:03	55.92	2/1/2010 16:36	66.73	2/1/2010 18:49	66.99
2/1/2010 11:29	55.76	2/1/2010 14:04	56.04	2/1/2010 16:37	66.77	2/1/2010 18:50	66.92
2/1/2010 11:30	55.89	2/1/2010 14:05	56.01	2/1/2010 16:38	66.81	2/1/2010 18:51	66.94
2/1/2010 11:31	56.1	2/1/2010 14:06	56.23	2/1/2010 16:39	66.8	2/1/2010 18:52	66.88
2/1/2010 11:32	56.37	2/1/2010 14:07	56.32	2/1/2010 16:40	66.84	2/1/2010 18:53	66.95
2/1/2010 11:33	56.17	2/1/2010 14:08	56.17	2/1/2010 16:41	66.48	2/1/2010 18:54	66.64
2/1/2010 11:34	55.96	2/1/2010 14:09	56.32	2/1/2010 16:42	66.48	2/1/2010 18:55	66.83
2/1/2010 11:35	55.82	2/1/2010 14:10	56.59	2/1/2010 16:43	67.02	2/1/2010 18:56	66.87
Average	55.93065574	Average	56.06967	Average	66.71787	Average	66.76852

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/1/2010 10:35	55.85	2/1/2010 13:10	55.84	2/1/2010 15:43	66.97	2/1/2010 17:56	66.01
2/1/2010 10:36	56	2/1/2010 13:11	55.93	2/1/2010 15:44	67.17	2/1/2010 17:57	66.33
2/1/2010 10:37	56.05	2/1/2010 13:12	55.98	2/1/2010 15:45	67.06	2/1/2010 17:58	66.79
2/1/2010 10:38	55.75	2/1/2010 13:13	56	2/1/2010 15:46	67.03	2/1/2010 17:59	66.97
2/1/2010 10:39	55.43	2/1/2010 13:14	56.1	2/1/2010 15:47	67.06	2/1/2010 18:00	67.04
2/1/2010 10:40	55.74	2/1/2010 13:15	55.94	2/1/2010 15:48	66.78	2/1/2010 18:01	66.85
2/1/2010 10:41	55.79	2/1/2010 13:16	55.98	2/1/2010 15:49	66.96	2/1/2010 18:02	66.81
2/1/2010 10:42	55.96	2/1/2010 13:17	56.03	2/1/2010 15:50	67.14	2/1/2010 18:03	67.14
2/1/2010 10:43	56.31	2/1/2010 13:18	56.08	2/1/2010 15:51	67.21	2/1/2010 18:04	67.34
2/1/2010 10:44	56.15	2/1/2010 13:19	56.17	2/1/2010 15:52	66.97	2/1/2010 18:05	67.11
2/1/2010 10:45	56.04	2/1/2010 13:20	56.33	2/1/2010 15:53	66.83	2/1/2010 18:06	66.73
2/1/2010 10:46	56.06	2/1/2010 13:21	56.38	2/1/2010 15:54	66.87	2/1/2010 18:07	66.76
2/1/2010 10:47	56.09	2/1/2010 13:22	56.41	2/1/2010 15:55	66.73	2/1/2010 18:08	66.78
2/1/2010 10:48	56.11	2/1/2010 13:23	56.42	2/1/2010 15:56	66.79	2/1/2010 18:09	67.07
2/1/2010 10:49	56.24	2/1/2010 13:24	56.44	2/1/2010 15:57	66.84	2/1/2010 18:10	66.73
2/1/2010 10:50	56.42	2/1/2010 13:25	56.43	2/1/2010 15:58	66.81	2/1/2010 18:11	66.85
2/1/2010 10:51	56.02	2/1/2010 13:26	56.36	2/1/2010 15:59	66.64	2/1/2010 18:12	66.97
2/1/2010 10:52	55.9	2/1/2010 13:27	56.38	2/1/2010 16:00	66.55	2/1/2010 18:13	66.97
2/1/2010 10:53	55.87	2/1/2010 13:28	56.58	2/1/2010 16:01	66.36	2/1/2010 18:14	66.64
2/1/2010 10:54	56.1	2/1/2010 13:29	56.54	2/1/2010 16:02	66.65	2/1/2010 18:15	66.58
2/1/2010 10:55	56.18	2/1/2010 13:30	56.51	2/1/2010 16:03	66.42	2/1/2010 18:16	66.74
2/1/2010 10:56	55.82	2/1/2010 13:31	56.44	2/1/2010 16:04	66.14	2/1/2010 18:17	66.2
2/1/2010 10:57	55.55	2/1/2010 13:32	56.29	2/1/2010 16:05	66.48	2/1/2010 18:18	66.48
2/1/2010 10:58	55.52	2/1/2010 13:33	56.2	2/1/2010 16:06	66.73	2/1/2010 18:19	66.69
2/1/2010 10:59	55.49	2/1/2010 13:34	56.27	2/1/2010 16:07	66.73	2/1/2010 18:20	66.59
2/1/2010 11:00	55.47	2/1/2010 13:35	56.34	2/1/2010 16:08	66.78	2/1/2010 18:21	66.43
2/1/2010 11:01	55.5	2/1/2010 13:36	56.38	2/1/2010 16:09	66.85	2/1/2010 18:22	66.75
2/1/2010 11:02	55.69	2/1/2010 13:37	56.32	2/1/2010 16:10	66.57	2/1/2010 18:23	66.65
2/1/2010 11:03	55.79	2/1/2010 13:38	56.32	2/1/2010 16:11	66.45	2/1/2010 18:24	66.74
2/1/2010 11:04	55.76	2/1/2010 13:39	56.48	2/1/2010 16:12	66.6	2/1/2010 18:25	66.64
2/1/2010 11:05	55.88	2/1/2010 13:40	56.52	2/1/2010 16:13	66.61	2/1/2010 18:26	66.67
2/1/2010 11:06	55.53	2/1/2010 13:41	56.3	2/1/2010 16:14	66.85	2/1/2010 18:27	66.9
2/1/2010 11:07	55.54	2/1/2010 13:42	56.34	2/1/2010 16:15	66.74	2/1/2010 18:28	66.85
2/1/2010 11:08	55.63	2/1/2010 13:43	56.39	2/1/2010 16:16	66.72	2/1/2010 18:29	66.72
2/1/2010 11:09	55.88	2/1/2010 13:44	56.42	2/1/2010 16:17	66.71	2/1/2010 18:30	66.38
2/1/2010 11:10	55.8	2/1/2010 13:45	56.41	2/1/2010 16:18	66.77	2/1/2010 18:31	66.2
2/1/2010 11:11	55.76	2/1/2010 13:46	56.4	2/1/2010 16:19	66.92	2/1/2010 18:32	66.42
2/1/2010 11:12	55.8	2/1/2010 13:47	56.39	2/1/2010 16:20	66.72	2/1/2010 18:33	66.74
2/1/2010 11:13	55.83	2/1/2010 13:48	56.4	2/1/2010 16:21	66.71	2/1/2010 18:34	67
2/1/2010 11:14	55.81	2/1/2010 13:49	56.4	2/1/2010 16:22	66.97	2/1/2010 18:35	66.72
2/1/2010 11:15	55.78	2/1/2010 13:50	56.41	2/1/2010 16:23	66.66	2/1/2010 18:36	66.88
2/1/2010 11:16	56.02	2/1/2010 13:51	56.42	2/1/2010 16:24	66.45	2/1/2010 18:37	66.8
2/1/2010 11:17	55.75	2/1/2010 13:52	56.42	2/1/2010 16:25	66.63	2/1/2010 18:38	66.88
2/1/2010 11:18	55.94	2/1/2010 13:53	56.43	2/1/2010 16:26	66.9	2/1/2010 18:39	66.95
2/1/2010 11:19	56.03	2/1/2010 13:54	56.43	2/1/2010 16:27	66.77	2/1/2010 18:40	66.96
2/1/2010 11:20	55.96	2/1/2010 13:55	56.44	2/1/2010 16:28	66.73	2/1/2010 18:41	66.82
2/1/2010 11:21	56.15	2/1/2010 13:56	56.38	2/1/2010 16:29	66.78	2/1/2010 18:42	66.67
2/1/2010 11:22	56.03	2/1/2010 13:57	56.24	2/1/2010 16:30	66.61	2/1/2010 18:43	66.62
2/1/2010 11:23	56.04	2/1/2010 13:58	56.34	2/1/2010 16:31	66.87	2/1/2010 18:44	66.82
2/1/2010 11:24	56.28	2/1/2010 13:59	56.39	2/1/2010 16:32	66.83	2/1/2010 18:45	67.02
2/1/2010 11:25	56.1	2/1/2010 14:00	56.33	2/1/2010 16:33	66.45	2/1/2010 18:46	67.06
2/1/2010 11:26	55.97	2/1/2010 14:01	56.27	2/1/2010 16:34	66.17	2/1/2010 18:47	66.87
2/1/2010 11:27	55.85	2/1/2010 14:02	56.15	2/1/2010 16:35	66.34	2/1/2010 18:48	66.97
2/1/2010 11:28	55.46	2/1/2010 14:03	56	2/1/2010 16:36	66.74	2/1/2010 18:49	67.08
2/1/2010 11:29	55.67	2/1/2010 14:04	56.09	2/1/2010 16:37	66.62	2/1/2010 18:50	67.12
2/1/2010 11:30	55.87	2/1/2010 14:05	56.04	2/1/2010 16:38	66.62	2/1/2010 18:51	66.88
2/1/2010 11:31	56.11	2/1/2010 14:06	56.4	2/1/2010 16:39	66.76	2/1/2010 18:52	66.63
2/1/2010 11:32	56.29	2/1/2010 14:07	56.55	2/1/2010 16:40	66.5	2/1/2010 18:53	66.77
2/1/2010 11:33	56.04	2/1/2010 14:08	56.24	2/1/2010 16:41	66.42	2/1/2010 18:54	66.58
2/1/2010 11:34	55.87	2/1/2010 14:09	56.33	2/1/2010 16:42	66.81	2/1/2010 18:55	66.65
2/1/2010 11:35	55.98	2/1/2010 14:10	56.53	2/1/2010 16:43	67	2/1/2010 18:56	66.57
Average	55.89016393	Average	56.30607	Average	66.73033	Average	66.76361

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/1/2010 10:35	56.09	2/1/2010 13:10	56.22	2/1/2010 15:43	67	2/1/2010 17:56	66.42
2/1/2010 10:36	55.98	2/1/2010 13:11	56.22	2/1/2010 15:44	66.93	2/1/2010 17:57	66.34
2/1/2010 10:37	55.87	2/1/2010 13:12	56.22	2/1/2010 15:45	67.04	2/1/2010 17:58	66.82
2/1/2010 10:38	55.8	2/1/2010 13:13	56.21	2/1/2010 15:46	67.15	2/1/2010 17:59	66.9
2/1/2010 10:39	55.85	2/1/2010 13:14	56.21	2/1/2010 15:47	67.19	2/1/2010 18:00	67.09
2/1/2010 10:40	55.89	2/1/2010 13:15	56.21	2/1/2010 15:48	67.04	2/1/2010 18:01	67.07
2/1/2010 10:41	55.94	2/1/2010 13:16	56.21	2/1/2010 15:49	66.92	2/1/2010 18:02	67.04
2/1/2010 10:42	55.98	2/1/2010 13:17	56.2	2/1/2010 15:50	66.9	2/1/2010 18:03	67.01
2/1/2010 10:43	55.98	2/1/2010 13:18	56.2	2/1/2010 15:51	66.88	2/1/2010 18:04	66.98
2/1/2010 10:44	55.98	2/1/2010 13:19	56.2	2/1/2010 15:52	66.86	2/1/2010 18:05	66.95
2/1/2010 10:45	55.99	2/1/2010 13:20	56.2	2/1/2010 15:53	66.84	2/1/2010 18:06	66.92
2/1/2010 10:46	55.99	2/1/2010 13:21	56.2	2/1/2010 15:54	66.82	2/1/2010 18:07	66.78
2/1/2010 10:47	55.99	2/1/2010 13:22	56.2	2/1/2010 15:55	66.79	2/1/2010 18:08	66.68
2/1/2010 10:48	55.99	2/1/2010 13:23	56.21	2/1/2010 15:56	66.77	2/1/2010 18:09	67.17
2/1/2010 10:49	56	2/1/2010 13:24	56.21	2/1/2010 15:57	66.75	2/1/2010 18:10	67.08
2/1/2010 10:50	56	2/1/2010 13:25	56.21	2/1/2010 15:58	66.73	2/1/2010 18:11	66.99
2/1/2010 10:51	55.99	2/1/2010 13:26	56.21	2/1/2010 15:59	66.71	2/1/2010 18:12	66.91
2/1/2010 10:52	55.95	2/1/2010 13:27	56.21	2/1/2010 16:00	66.69	2/1/2010 18:13	66.82
2/1/2010 10:53	55.92	2/1/2010 13:28	56.21	2/1/2010 16:01	66.66	2/1/2010 18:14	66.76
2/1/2010 10:54	55.88	2/1/2010 13:29	56.22	2/1/2010 16:02	66.64	2/1/2010 18:15	66.75
2/1/2010 10:55	55.84	2/1/2010 13:30	56.22	2/1/2010 16:03	66.62	2/1/2010 18:16	66.74
2/1/2010 10:56	55.81	2/1/2010 13:31	56.22	2/1/2010 16:04	66.6	2/1/2010 18:17	66.74
2/1/2010 10:57	55.82	2/1/2010 13:32	56.19	2/1/2010 16:05	66.58	2/1/2010 18:18	66.73
2/1/2010 10:58	55.83	2/1/2010 13:33	56.07	2/1/2010 16:06	66.57	2/1/2010 18:19	66.73
2/1/2010 10:59	55.84	2/1/2010 13:34	55.95	2/1/2010 16:07	66.58	2/1/2010 18:20	66.72
2/1/2010 11:00	55.85	2/1/2010 13:35	55.86	2/1/2010 16:08	66.59	2/1/2010 18:21	66.72
2/1/2010 11:01	55.86	2/1/2010 13:36	55.85	2/1/2010 16:09	66.6	2/1/2010 18:22	66.71
2/1/2010 11:02	55.87	2/1/2010 13:37	55.84	2/1/2010 16:10	66.61	2/1/2010 18:23	66.7
2/1/2010 11:03	55.88	2/1/2010 13:38	55.83	2/1/2010 16:11	66.62	2/1/2010 18:24	66.69
2/1/2010 11:04	55.89	2/1/2010 13:39	55.83	2/1/2010 16:12	66.64	2/1/2010 18:25	66.68
2/1/2010 11:05	55.9	2/1/2010 13:40	55.83	2/1/2010 16:13	66.65	2/1/2010 18:26	66.67
2/1/2010 11:06	55.91	2/1/2010 13:41	55.83	2/1/2010 16:14	66.66	2/1/2010 18:27	66.66
2/1/2010 11:07	55.92	2/1/2010 13:42	55.82	2/1/2010 16:15	66.67	2/1/2010 18:28	66.64
2/1/2010 11:08	55.93	2/1/2010 13:43	55.82	2/1/2010 16:16	66.68	2/1/2010 18:29	66.63
2/1/2010 11:09	55.94	2/1/2010 13:44	55.82	2/1/2010 16:17	66.69	2/1/2010 18:30	66.63
2/1/2010 11:10	55.95	2/1/2010 13:45	55.82	2/1/2010 16:18	66.71	2/1/2010 18:31	66.63
2/1/2010 11:11	55.96	2/1/2010 13:46	55.83	2/1/2010 16:19	66.72	2/1/2010 18:32	66.63
2/1/2010 11:12	55.97	2/1/2010 13:47	55.89	2/1/2010 16:20	66.73	2/1/2010 18:33	66.63
2/1/2010 11:13	55.98	2/1/2010 13:48	55.95	2/1/2010 16:21	66.74	2/1/2010 18:34	66.67
2/1/2010 11:14	55.99	2/1/2010 13:49	56.01	2/1/2010 16:22	66.75	2/1/2010 18:35	66.7
2/1/2010 11:15	56	2/1/2010 13:50	56.07	2/1/2010 16:23	66.76	2/1/2010 18:36	66.74
2/1/2010 11:16	56.01	2/1/2010 13:51	56.13	2/1/2010 16:24	66.78	2/1/2010 18:37	66.77
2/1/2010 11:17	56.02	2/1/2010 13:52	56.19	2/1/2010 16:25	66.79	2/1/2010 18:38	66.81
2/1/2010 11:18	56.03	2/1/2010 13:53	56.25	2/1/2010 16:26	66.8	2/1/2010 18:39	66.84
2/1/2010 11:19	56.04	2/1/2010 13:54	56.27	2/1/2010 16:27	66.81	2/1/2010 18:40	66.87
2/1/2010 11:20	56.05	2/1/2010 13:55	56.2	2/1/2010 16:28	66.82	2/1/2010 18:41	66.9
2/1/2010 11:21	56.06	2/1/2010 13:56	56.12	2/1/2010 16:29	66.82	2/1/2010 18:42	66.89
2/1/2010 11:22	56.07	2/1/2010 13:57	56.05	2/1/2010 16:30	66.78	2/1/2010 18:43	66.88
2/1/2010 11:23	56.07	2/1/2010 13:58	55.97	2/1/2010 16:31	66.75	2/1/2010 18:44	66.87
2/1/2010 11:24	56.07	2/1/2010 13:59	55.9	2/1/2010 16:32	66.71	2/1/2010 18:45	66.86
2/1/2010 11:25	56.06	2/1/2010 14:00	55.86	2/1/2010 16:33	66.67	2/1/2010 18:46	66.85
2/1/2010 11:26	56.05	2/1/2010 14:01	55.9	2/1/2010 16:34	66.64	2/1/2010 18:47	66.84
2/1/2010 11:27	56.05	2/1/2010 14:02	55.95	2/1/2010 16:35	66.6	2/1/2010 18:48	66.83
2/1/2010 11:28	56.04	2/1/2010 14:03	55.99	2/1/2010 16:36	66.6	2/1/2010 18:49	66.82
2/1/2010 11:29	56.04	2/1/2010 14:04	56.04	2/1/2010 16:37	66.68	2/1/2010 18:50	66.81
2/1/2010 11:30	56.03	2/1/2010 14:05	56.08	2/1/2010 16:38	66.77	2/1/2010 18:51	66.8
2/1/2010 11:31	56.02	2/1/2010 14:06	56.13	2/1/2010 16:39	66.86	2/1/2010 18:52	66.79
2/1/2010 11:32	55.99	2/1/2010 14:07	56.18	2/1/2010 16:40	66.88	2/1/2010 18:53	66.78
2/1/2010 11:33	55.96	2/1/2010 14:08	56.22	2/1/2010 16:41	66.74	2/1/2010 18:54	66.77
2/1/2010 11:34	55.96	2/1/2010 14:09	56.27	2/1/2010 16:42	66.63	2/1/2010 18:55	66.77
2/1/2010 11:35	56.02	2/1/2010 14:10	56.31	2/1/2010 16:43	66.62	2/1/2010 18:56	66.71
Average	55.96131148	Average	56.0777	Average	66.75131	Average	66.78902

Total SUM	221.9372131	Total SUM	222.7064	Total SUM	265.1233	Total SUM	265.2815
-----------	-------------	-----------	----------	-----------	----------	-----------	----------

OPACITY - UNIT 3

Run 1	
Date/Time	MPP3 OPACITY Value

02/01/2010 10:30 5.04
02/01/2010 10:36 5.05
02/01/2010 10:42 4.98
02/01/2010 10:48 5.08
02/01/2010 10:54 4.89
02/01/2010 11:00 5.05
02/01/2010 11:06 4.75
02/01/2010 11:12 5.01
02/01/2010 11:18 5.00
02/01/2010 11:24 5.18
02/01/2010 11:30 5.06
02/01/2010 11:36 5.15

Run 2	
Date/Time	MPP3 OPACITY Value

02/01/2010 13:06 4.64
02/01/2010 13:12 4.96
02/01/2010 13:18 4.63
02/01/2010 13:24 4.75
02/01/2010 13:30 4.79
02/01/2010 13:36 4.76
02/01/2010 13:42 5.02
02/01/2010 13:48 5.13
02/01/2010 13:54 5.27
02/01/2010 14:00 5.01
02/01/2010 14:06 5.00
02/01/2010 14:12 4.79

Run 3	
Date/Time	MPP3 OPACITY Value

02/01/2010 15:42 5.65
02/01/2010 15:48 5.81
02/01/2010 15:54 5.65
02/01/2010 16:00 5.62
02/01/2010 16:06 5.70
02/01/2010 16:12 5.63
02/01/2010 16:18 5.46
02/01/2010 16:24 5.61
02/01/2010 16:30 5.80
02/01/2010 16:36 5.81
02/01/2010 16:42 5.71
02/01/2010 16:48 5.59

Run 4	
Date/Time	MPP3 OPACITY Value

02/01/2010 17:54 5.77
02/01/2010 18:00 5.58
02/01/2010 18:06 5.66
02/01/2010 18:12 5.72
02/01/2010 18:18 5.65
02/01/2010 18:24 5.51
02/01/2010 18:30 5.57
02/01/2010 18:36 5.70
02/01/2010 18:42 5.55
02/01/2010 18:48 5.53
02/01/2010 18:54 5.80
02/01/2010 19:00 5.71

59

February 2, 2010

Unit 3 Sorbent Injection - Common, APH, and ESP Feeder

Run 5		Run 6		Run 7		Run 8		Run 9	
Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr
2/2/2010 6:35	955	2/2/2010 9:02	499	2/2/2010 13:05	507	2/2/2010 17:30	0	2/2/2010 19:44	0
2/2/2010 6:36	951	2/2/2010 9:03	500	2/2/2010 13:06	505	2/2/2010 17:31	0	2/2/2010 19:45	0
2/2/2010 6:37	954	2/2/2010 9:04	500	2/2/2010 13:07	505	2/2/2010 17:32	0	2/2/2010 19:46	0
2/2/2010 6:38	958	2/2/2010 9:05	501	2/2/2010 13:08	505	2/2/2010 17:33	0	2/2/2010 19:47	0
2/2/2010 6:39	958	2/2/2010 9:06	502	2/2/2010 13:09	505	2/2/2010 17:34	0	2/2/2010 19:48	0
2/2/2010 6:40	956	2/2/2010 9:07	502	2/2/2010 13:10	506	2/2/2010 17:35	0	2/2/2010 19:49	0
2/2/2010 6:41	953	2/2/2010 9:08	502	2/2/2010 13:11	321	2/2/2010 17:36	0	2/2/2010 19:50	0
2/2/2010 6:42	952	2/2/2010 9:09	501	2/2/2010 13:12	0	2/2/2010 17:37	0	2/2/2010 19:51	0
2/2/2010 6:43	948	2/2/2010 9:10	500	2/2/2010 13:13	0	2/2/2010 17:38	0	2/2/2010 19:52	0
2/2/2010 6:44	949	2/2/2010 9:11	502	2/2/2010 13:14	0	2/2/2010 17:39	0	2/2/2010 19:53	0
2/2/2010 6:45	957	2/2/2010 9:12	503	2/2/2010 13:15	0	2/2/2010 17:40	0	2/2/2010 19:54	0
2/2/2010 6:46	970	2/2/2010 9:13	503	2/2/2010 13:16	0	2/2/2010 17:41	0	2/2/2010 19:55	0
2/2/2010 6:47	965	2/2/2010 9:14	503	2/2/2010 13:17	0	2/2/2010 17:42	0	2/2/2010 19:56	0
2/2/2010 6:48	964	2/2/2010 9:15	503	2/2/2010 13:18	0	2/2/2010 17:43	0	2/2/2010 19:57	0
2/2/2010 6:49	963	2/2/2010 9:16	503	2/2/2010 13:19	0	2/2/2010 17:44	0	2/2/2010 19:58	0
2/2/2010 6:50	961	2/2/2010 9:17	503	2/2/2010 13:20	0	2/2/2010 17:45	0	2/2/2010 19:59	0
2/2/2010 6:51	958	2/2/2010 9:18	502	2/2/2010 13:21	0	2/2/2010 17:46	0	2/2/2010 20:00	0
2/2/2010 6:52	953	2/2/2010 9:19	504	2/2/2010 13:22	0	2/2/2010 17:47	0	2/2/2010 20:01	0
2/2/2010 6:53	956	2/2/2010 9:20	505	2/2/2010 13:23	0	2/2/2010 17:48	0	2/2/2010 20:02	0
2/2/2010 6:54	954	2/2/2010 9:21	504	2/2/2010 13:24	0	2/2/2010 17:49	0	2/2/2010 20:03	0
2/2/2010 6:55	953	2/2/2010 9:22	503	2/2/2010 13:25	0	2/2/2010 17:50	0	2/2/2010 20:04	0
2/2/2010 6:56	947	2/2/2010 9:23	503	2/2/2010 13:26	0	2/2/2010 17:51	0	2/2/2010 20:05	0
2/2/2010 6:57	944	2/2/2010 9:24	504	2/2/2010 13:27	0	2/2/2010 17:52	0	2/2/2010 20:06	0
2/2/2010 6:58	943	2/2/2010 9:25	505	2/2/2010 13:28	0	2/2/2010 17:53	0	2/2/2010 20:07	0
2/2/2010 6:59	942	2/2/2010 9:26	506	2/2/2010 13:29	0	2/2/2010 17:54	0	2/2/2010 20:08	0
2/2/2010 7:00	944	2/2/2010 9:27	507	2/2/2010 13:30	0	2/2/2010 17:55	0	2/2/2010 20:09	0
2/2/2010 7:01	951	2/2/2010 9:28	505	2/2/2010 13:31	0	2/2/2010 17:56	0	2/2/2010 20:10	0
2/2/2010 7:02	958	2/2/2010 9:29	503	2/2/2010 13:32	0	2/2/2010 17:57	0	2/2/2010 20:11	0
2/2/2010 7:03	957	2/2/2010 9:30	502	2/2/2010 13:33	0	2/2/2010 17:58	0	2/2/2010 20:12	0
2/2/2010 7:04	956	2/2/2010 9:31	501	2/2/2010 13:34	0	2/2/2010 17:59	0	2/2/2010 20:13	0
2/2/2010 7:05	957	2/2/2010 9:32	502	2/2/2010 13:35	0	2/2/2010 18:00	0	2/2/2010 20:14	0
2/2/2010 7:06	958	2/2/2010 9:33	503	2/2/2010 13:36	0	2/2/2010 18:01	0	2/2/2010 20:15	0
2/2/2010 7:07	960	2/2/2010 9:34	504	2/2/2010 13:37	0	2/2/2010 18:02	0	2/2/2010 20:16	0
2/2/2010 7:08	961	2/2/2010 9:35	506	2/2/2010 13:38	0	2/2/2010 18:03	0	2/2/2010 20:17	0
2/2/2010 7:09	960	2/2/2010 9:36	504	2/2/2010 13:39	0	2/2/2010 18:04	0	2/2/2010 20:18	0
2/2/2010 7:10	956	2/2/2010 9:37	503	2/2/2010 13:40	0	2/2/2010 18:05	0	2/2/2010 20:19	0
2/2/2010 7:11	951	2/2/2010 9:38	503	2/2/2010 13:41	0	2/2/2010 18:06	0	2/2/2010 20:20	0
2/2/2010 7:12	951	2/2/2010 9:39	503	2/2/2010 13:42	0	2/2/2010 18:07	0	2/2/2010 20:21	0
2/2/2010 7:13	949	2/2/2010 9:40	501	2/2/2010 13:43	0	2/2/2010 18:08	0	2/2/2010 20:22	0
2/2/2010 7:14	950	2/2/2010 9:41	500	2/2/2010 13:44	0	2/2/2010 18:09	0	2/2/2010 20:23	0
2/2/2010 7:15	955	2/2/2010 9:42	501	2/2/2010 13:45	0	2/2/2010 18:10	0	2/2/2010 20:24	0
2/2/2010 7:16	957	2/2/2010 9:43	502	2/2/2010 13:46	0	2/2/2010 18:11	0	2/2/2010 20:25	0
2/2/2010 7:17	951	2/2/2010 9:44	502	2/2/2010 13:47	0	2/2/2010 18:12	0	2/2/2010 20:26	0
2/2/2010 7:18	947	2/2/2010 9:45	500	2/2/2010 13:48	0	2/2/2010 18:13	0	2/2/2010 20:27	0
2/2/2010 7:19	948	2/2/2010 9:46	501	2/2/2010 13:49	0	2/2/2010 18:14	0	2/2/2010 20:28	0
2/2/2010 7:20	948	2/2/2010 9:47	502	2/2/2010 13:50	0	2/2/2010 18:15	0	2/2/2010 20:29	0
2/2/2010 7:21	952	2/2/2010 9:48	503	2/2/2010 13:51	0	2/2/2010 18:16	0	2/2/2010 20:30	0
2/2/2010 7:22	960	2/2/2010 9:49	503	2/2/2010 13:52	0	2/2/2010 18:17	0	2/2/2010 20:31	0
2/2/2010 7:23	959	2/2/2010 9:50	504	2/2/2010 13:53	0	2/2/2010 18:18	0	2/2/2010 20:32	0
2/2/2010 7:24	960	2/2/2010 9:51	504	2/2/2010 13:54	0	2/2/2010 18:19	0	2/2/2010 20:33	0
2/2/2010 7:25	964	2/2/2010 9:52	502	2/2/2010 13:55	0	2/2/2010 18:20	0	2/2/2010 20:34	0
2/2/2010 7:26	962	2/2/2010 9:53	505	2/2/2010 13:56	0	2/2/2010 18:21	0	2/2/2010 20:35	0
2/2/2010 7:27	958	2/2/2010 9:54	510	2/2/2010 13:57	0	2/2/2010 18:22	0	2/2/2010 20:36	0
2/2/2010 7:28	961	2/2/2010 9:55	508	2/2/2010 13:58	0	2/2/2010 18:23	0	2/2/2010 20:37	0
2/2/2010 7:29	956	2/2/2010 9:56	505	2/2/2010 13:59	0	2/2/2010 18:24	0	2/2/2010 20:38	0
2/2/2010 7:30	960	2/2/2010 9:57	502	2/2/2010 14:00	0	2/2/2010 18:25	0	2/2/2010 20:39	0
2/2/2010 7:31	967	2/2/2010 9:58	503	2/2/2010 14:01	0	2/2/2010 18:26	0	2/2/2010 20:40	0
2/2/2010 7:32	963	2/2/2010 9:59	503	2/2/2010 14:02	0	2/2/2010 18:27	0	2/2/2010 20:41	0
2/2/2010 7:33	964	2/2/2010 10:00	505	2/2/2010 14:03	0	2/2/2010 18:28	0	2/2/2010 20:42	0
2/2/2010 7:34	961	2/2/2010 10:01	506	2/2/2010 14:04	0	2/2/2010 18:29	0	2/2/2010 20:43	0
2/2/2010 7:35	958	2/2/2010 10:02	507	2/2/2010 14:05	0	2/2/2010 18:30	0	2/2/2010 20:44	0
Average	956	Average	503	Average	55	Average	0	Average	0

Run 5	
Date/Time	MPP3 SO2#/MM Value

02/02/2010 06:35	
02/02/2010 06:36	
02/02/2010 06:37	
02/02/2010 06:38	
02/02/2010 06:39	
02/02/2010 06:40	0.452
02/02/2010 06:41	0.483
02/02/2010 06:42	0.518
02/02/2010 06:43	0.552
02/02/2010 06:44	0.578
02/02/2010 06:45	0.603
02/02/2010 06:46	0.694
02/02/2010 06:47	0.541
02/02/2010 06:48	0.505
02/02/2010 06:49	0.459
02/02/2010 06:50	
02/02/2010 06:51	
02/02/2010 06:52	
02/02/2010 06:53	
02/02/2010 06:54	
02/02/2010 06:55	0.471
02/02/2010 06:56	0.501
02/02/2010 06:57	0.529
02/02/2010 06:58	0.555
02/02/2010 06:59	0.580
02/02/2010 07:00	0.603
02/02/2010 07:01	0.603
02/02/2010 07:02	0.542
02/02/2010 07:03	0.462
02/02/2010 07:04	0.409
02/02/2010 07:05	
02/02/2010 07:06	
02/02/2010 07:07	
02/02/2010 07:08	
02/02/2010 07:09	
02/02/2010 07:10	0.497
02/02/2010 07:11	0.525
02/02/2010 07:12	0.521
02/02/2010 07:13	0.497
02/02/2010 07:14	0.465
02/02/2010 07:15	0.458
02/02/2010 07:16	0.468
02/02/2010 07:17	0.492
02/02/2010 07:18	0.520
02/02/2010 07:19	0.528
02/02/2010 07:20	
02/02/2010 07:21	
02/02/2010 07:22	
02/02/2010 07:23	
02/02/2010 07:24	
02/02/2010 07:25	0.445
02/02/2010 07:26	0.410
02/02/2010 07:27	0.393
02/02/2010 07:28	0.407
02/02/2010 07:29	0.428
02/02/2010 07:30	0.461
02/02/2010 07:31	0.490
02/02/2010 07:32	0.514
02/02/2010 07:33	0.538
02/02/2010 07:34	0.561
02/02/2010 07:35	

Run 6	
Date/Time	MPP3 SO2#/MM Value

02/02/2010 09:02	0.436
02/02/2010 09:03	0.454
02/02/2010 09:04	0.477
02/02/2010 09:05	
02/02/2010 09:06	
02/02/2010 09:07	
02/02/2010 09:08	
02/02/2010 09:09	
02/02/2010 09:10	0.553
02/02/2010 09:11	0.501
02/02/2010 09:12	0.447
02/02/2010 09:13	0.415
02/02/2010 09:14	0.410
02/02/2010 09:15	0.429
02/02/2010 09:16	0.453
02/02/2010 09:17	0.470
02/02/2010 09:18	0.494
02/02/2010 09:19	0.508
02/02/2010 09:20	
02/02/2010 09:21	
02/02/2010 09:22	
02/02/2010 09:23	
02/02/2010 09:24	
02/02/2010 09:25	0.486
02/02/2010 09:26	0.511
02/02/2010 09:27	0.527
02/02/2010 09:28	0.544
02/02/2010 09:29	0.522
02/02/2010 09:30	0.505
02/02/2010 09:31	0.501
02/02/2010 09:32	0.485
02/02/2010 09:33	0.424
02/02/2010 09:34	0.401
02/02/2010 09:35	
02/02/2010 09:36	
02/02/2010 09:37	
02/02/2010 09:38	
02/02/2010 09:39	
02/02/2010 09:40	0.483
02/02/2010 09:41	0.508
02/02/2010 09:42	0.534
02/02/2010 09:43	0.558
02/02/2010 09:44	0.583
02/02/2010 09:45	0.544
02/02/2010 09:46	0.513
02/02/2010 09:47	0.480
02/02/2010 09:48	0.457
02/02/2010 09:49	0.439
02/02/2010 09:50	
02/02/2010 09:51	
02/02/2010 09:52	
02/02/2010 09:53	
02/02/2010 09:54	
02/02/2010 09:55	0.505
02/02/2010 09:56	0.506
02/02/2010 09:57	0.477
02/02/2010 09:58	0.449
02/02/2010 09:59	0.443
02/02/2010 10:00	0.460
02/02/2010 10:01	0.488
02/02/2010 10:02	0.505

Run 7	
Date/Time	MPP3 SO2#/MM Value

02/02/2010 13:05	
02/02/2010 13:06	
02/02/2010 13:07	
02/02/2010 13:08	
02/02/2010 13:09	
02/02/2010 13:10	0.543
02/02/2010 13:11	0.524
02/02/2010 13:12	0.487
02/02/2010 13:13	0.463
02/02/2010 13:14	0.427
02/02/2010 13:15	0.404
02/02/2010 13:16	0.425
02/02/2010 13:17	0.460
02/02/2010 13:18	0.486
02/02/2010 13:19	0.517
02/02/2010 13:20	
02/02/2010 13:21	
02/02/2010 13:22	
02/02/2010 13:23	
02/02/2010 13:24	
02/02/2010 13:25	0.561
02/02/2010 13:26	0.507
02/02/2010 13:27	0.463
02/02/2010 13:28	0.448
02/02/2010 13:29	0.450
02/02/2010 13:30	0.471
02/02/2010 13:31	0.501
02/02/2010 13:32	0.523
02/02/2010 13:33	0.551
02/02/2010 13:34	0.593
02/02/2010 13:35	
02/02/2010 13:36	
02/02/2010 13:37	
02/02/2010 13:38	
02/02/2010 13:39	
02/02/2010 13:40	0.811
02/02/2010 13:41	0.613
02/02/2010 13:42	0.579
02/02/2010 13:43	0.547
02/02/2010 13:44	0.533
02/02/2010 13:45	0.528
02/02/2010 13:46	0.545
02/02/2010 13:47	0.567
02/02/2010 13:48	0.583
02/02/2010 13:49	0.597
02/02/2010 13:50	
02/02/2010 13:51	
02/02/2010 13:52	
02/02/2010 13:53	
02/02/2010 13:54	
02/02/2010 13:55	0.604
02/02/2010 13:56	0.637
02/02/2010 13:57	0.666
02/02/2010 13:58	0.695
02/02/2010 13:59	0.671
02/02/2010 14:00	0.639
02/02/2010 14:01	0.601
02/02/2010 14:02	0.548
02/02/2010 14:03	0.512
02/02/2010 14:04	0.497
02/02/2010 14:05	

Run 8	
Date/Time	MPP3 SO2#/MM Value

02/02/2010 17:30	0.682
02/02/2010 17:31	0.669
02/02/2010 17:32	0.665
02/02/2010 17:33	0.653
02/02/2010 17:34	0.622
02/02/2010 17:35	
02/02/2010 17:36	
02/02/2010 17:37	
02/02/2010 17:38	
02/02/2010 17:39	
02/02/2010 17:40	0.662
02/02/2010 17:41	0.704
02/02/2010 17:42	0.739
02/02/2010 17:43	0.757
02/02/2010 17:44	0.743
02/02/2010 17:45	0.698
02/02/2010 17:46	0.637
02/02/2010 17:47	0.584
02/02/2010 17:48	0.553
02/02/2010 17:49	0.549
02/02/2010 17:50	
02/02/2010 17:51	
02/02/2010 17:52	
02/02/2010 17:53	
02/02/2010 17:54	
02/02/2010 17:55	0.722
02/02/2010 17:56	0.745
02/02/2010 17:57	0.757
02/02/2010 17:58	0.730
02/02/2010 17:59	0.675
02/02/2010 18:00	0.619
02/02/2010 18:01	0.583
02/02/2010 18:02	0.568
02/02/2010 18:03	0.580
02/02/2010 18:04	0.615
02/02/2010 18:05	
02/02/2010 18:06	
02/02/2010 18:07	
02/02/2010 18:08	
02/02/2010 18:09	
02/02/2010 18:10	0.769
02/02/2010 18:11	0.716
02/02/2010 18:12	0.666
02/02/2010 18:13	0.623
02/02/2010 18:14	0.611
02/02/2010 18:15	0.606
02/02/2010 18:16	0.619
02/02/2010 18:17	0.655
02/02/2010 18:18	0.683
02/02/2010 18:19	0.702
02/02/2010 18:20	
02/02/2010 18:21	
02/02/2010 18:22	
02/02/2010 18:23	
02/02/2010 18:24	
02/02/2010 18:25	0.673
02/02/2010 18:26	0.710
02/02/2010 18:27	0.742
02/02/2010 18:28	0.770
02/02/2010 18:29	0.780
02/02/2010 18:30	0.753

Run 9	
Date/Time	MPP3 SO2#/MM Value

02/02/2010 19:44	0.736
02/02/2010 19:45	0.764
02/02/2010 19:46	0.751
02/02/2010 19:47	0.754
02/02/2010 19:48	0.674
02/02/2010 19:49	0.681
02/02/2010 19:50	
02/02/2010 19:51	
02/02/2010 19:52	
02/02/2010 19:53	
02/02/2010 19:54	
02/02/2010 19:55	0.686
02/02/2010 19:56	0.708
02/02/2010 19:57	0.718
02/02/2010 19:58	0.686
02/02/2010 19:59	0.646
02/02/2010 20:00	0.619
02/02/2010 20:01	0.642
02/02/2010 20:02	0.675
02/02/2010 20:03	0.722
02/02/2010 20:04	0.759
02/02/2010 20:05	
02/02/2010 20:06	
02/02/2010 20:07	
02/02/2010 20:08	
02/02/2010 20:09	
02/02/2010 20:10	0.699
02/02/2010 20:11	0.707
02/02/2010 20:12	0.698
02/02/2010 20:13	0.686
02/02/2010 20:14	0.692
02/02/2010 20:15	0.711
02/02/2010 20:16	0.741
02/02/2010 20:17	0.731
02/02/2010 20:18	0.680
02/02/2010 20:19	0.654
02/02/2010 20:20	
02/02/2010 20:21	
02/02/2010 20:22	
02/02/2010 20:23	
02/02/2010 20:24	
02/02/2010 20:25	0.832
02/02/2010 20:26	0.836
02/02/2010 20:27	0.803
02/02/2010 20:28	0.727
02/02/2010 20:29	0.650
02/02/2010 20:30	0.601
02/02/2010 20:31	0.579
02/02/2010 20:32	0.592
02/02/2010 20:33	0.627
02/02/2010 20:34	0.673
02/02/2010 20:35	
02/02/2010 20:36	
02/02/2010 20:37	
02/02/2010 20:38	
02/02/2010 20:39	
02/02/2010 20:40	0.809
02/02/2010 20:41	0.754
02/02/2010 20:42	0.687
02/02/2010 20:43	0.640
02/02/2010 20:44	0.639

Invalid data: either a daily calibration check or a blowback period
 Invalid data: calibration check or maintenance

Blowback Times	5
15 minutes	20
35 minutes BB	35
50 minutes	50

Run 5

Coal Flow Coal Flow kpph
Total SUM 220.898

Run 6

Coal Flow Coal Flow kpph
Total SUM 221.7011

Run 7

Coal Flow Coal Flow kpph
Total SUM 278.5669

Run 8

Coal Flow Coal Flow kpph
Total SUM 303.6869

Run 9

Coal Flow Coal Flow kpph
Total SUM 304.7423

Run 5	
Coal Flow 31	Coal Flow kpph

2/2/2010 6:35	53.87
2/2/2010 6:36	53.98
2/2/2010 6:37	53.92
2/2/2010 6:38	54.1
2/2/2010 6:39	54.01
2/2/2010 6:40	53.92
2/2/2010 6:41	53.91
2/2/2010 6:42	53.54
2/2/2010 6:43	53.52
2/2/2010 6:44	53.55
2/2/2010 6:45	53.7
2/2/2010 6:46	54.06
2/2/2010 6:47	54.59
2/2/2010 6:48	54.47
2/2/2010 6:49	54.27
2/2/2010 6:50	54.22
2/2/2010 6:51	54.06
2/2/2010 6:52	54.05
2/2/2010 6:53	53.77
2/2/2010 6:54	53.5
2/2/2010 6:55	53.41
2/2/2010 6:56	53.39
2/2/2010 6:57	53.21
2/2/2010 6:58	53.38
2/2/2010 6:59	53.12
2/2/2010 7:00	53.43
2/2/2010 7:01	53.74
2/2/2010 7:02	54.06
2/2/2010 7:03	54.16
2/2/2010 7:04	53.98
2/2/2010 7:05	53.97
2/2/2010 7:06	53.88
2/2/2010 7:07	53.69
2/2/2010 7:08	53.75
2/2/2010 7:09	53.8
2/2/2010 7:10	53.61
2/2/2010 7:11	53.61
2/2/2010 7:12	53.62
2/2/2010 7:13	53.53
2/2/2010 7:14	53.47
2/2/2010 7:15	53.7
2/2/2010 7:16	53.67
2/2/2010 7:17	53.54
2/2/2010 7:18	53.45
2/2/2010 7:19	53.52
2/2/2010 7:20	53.74
2/2/2010 7:21	53.97
2/2/2010 7:22	54.11
2/2/2010 7:23	54.02
2/2/2010 7:24	53.95
2/2/2010 7:25	54.09
2/2/2010 7:26	54.01
2/2/2010 7:27	54.18
2/2/2010 7:28	54.08
2/2/2010 7:29	54
2/2/2010 7:30	54.16
2/2/2010 7:31	54.16
2/2/2010 7:32	54.16
2/2/2010 7:33	54.16
2/2/2010 7:34	54.16
2/2/2010 7:35	54.07

Average 53.84754

Run 6	
Coal Flow 31	Coal Flow kpph

2/2/2010 9:02	53.72
2/2/2010 9:03	53.72
2/2/2010 9:04	53.73
2/2/2010 9:05	53.89
2/2/2010 9:06	54.09
2/2/2010 9:07	53.92
2/2/2010 9:08	53.81
2/2/2010 9:09	53.67
2/2/2010 9:10	53.86
2/2/2010 9:11	53.98
2/2/2010 9:12	53.98
2/2/2010 9:13	54.08
2/2/2010 9:14	54.15
2/2/2010 9:15	53.94
2/2/2010 9:16	53.83
2/2/2010 9:17	53.7
2/2/2010 9:18	53.91
2/2/2010 9:19	54.12
2/2/2010 9:20	54.26
2/2/2010 9:21	54.27
2/2/2010 9:22	54.19
2/2/2010 9:23	54.11
2/2/2010 9:24	54.29
2/2/2010 9:25	54.31
2/2/2010 9:26	54.32
2/2/2010 9:27	54.24
2/2/2010 9:28	54.08
2/2/2010 9:29	54.01
2/2/2010 9:30	53.86
2/2/2010 9:31	53.99
2/2/2010 9:32	54.08
2/2/2010 9:33	54.2
2/2/2010 9:34	54.27
2/2/2010 9:35	54.07
2/2/2010 9:36	54.1
2/2/2010 9:37	54.13
2/2/2010 9:38	54.06
2/2/2010 9:39	53.99
2/2/2010 9:40	54.07
2/2/2010 9:41	53.75
2/2/2010 9:42	53.66
2/2/2010 9:43	53.87
2/2/2010 9:44	53.87
2/2/2010 9:45	53.79
2/2/2010 9:46	53.59
2/2/2010 9:47	53.66
2/2/2010 9:48	54.14
2/2/2010 9:49	54.34
2/2/2010 9:50	54.32
2/2/2010 9:51	54.3
2/2/2010 9:52	54.28
2/2/2010 9:53	54.36
2/2/2010 9:54	54.47
2/2/2010 9:55	54.3
2/2/2010 9:56	54.19
2/2/2010 9:57	54.19
2/2/2010 9:58	54.19
2/2/2010 9:59	54.19
2/2/2010 10:00	54.2
2/2/2010 10:01	54.2
2/2/2010 10:02	54.2

Average 54.05016

Run 7	
Coal Flow 31	Coal Flow kpph

2/2/2010 13:04	54.55
2/2/2010 13:05	54.17
2/2/2010 13:06	54.17
2/2/2010 13:07	54.27
2/2/2010 13:08	54.44
2/2/2010 13:09	54.45
2/2/2010 13:10	54.46
2/2/2010 13:11	54.47
2/2/2010 13:12	54.48
2/2/2010 13:13	54.83
2/2/2010 13:14	55.65
2/2/2010 13:15	56.45
2/2/2010 13:16	57.81
2/2/2010 13:17	59.53
2/2/2010 13:18	61.25
2/2/2010 13:19	62.77
2/2/2010 13:20	63.6
2/2/2010 13:21	63.78
2/2/2010 13:22	63.99
2/2/2010 13:23	64.64
2/2/2010 13:24	65.71
2/2/2010 13:25	66.88
2/2/2010 13:26	67.54
2/2/2010 13:27	68.35
2/2/2010 13:28	69.07
2/2/2010 13:29	69.64
2/2/2010 13:30	70.12
2/2/2010 13:31	70.92
2/2/2010 13:32	71.75
2/2/2010 13:33	71.27
2/2/2010 13:34	70.89
2/2/2010 13:35	70.2
2/2/2010 13:36	69.56
2/2/2010 13:37	69.41
2/2/2010 13:38	69.44
2/2/2010 13:39	70.02
2/2/2010 13:40	71.01
2/2/2010 13:41	72
2/2/2010 13:42	72.82
2/2/2010 13:43	73.49
2/2/2010 13:44	74.38
2/2/2010 13:45	75.39
2/2/2010 13:46	76.95
2/2/2010 13:47	78.31
2/2/2010 13:48	78.31
2/2/2010 13:49	78.21
2/2/2010 13:50	78.28
2/2/2010 13:51	78.53
2/2/2010 13:52	78.46
2/2/2010 13:53	78.64
2/2/2010 13:54	78.49
2/2/2010 13:55	78.25
2/2/2010 13:56	78.36
2/2/2010 13:57	78.45
2/2/2010 13:58	78.48
2/2/2010 13:59	78.52
2/2/2010 14:00	78.56
2/2/2010 14:01	78.48
2/2/2010 14:02	78.44
2/2/2010 14:03	78.66
2/2/2010 14:04	78.07

Average 68.72213

Run 8	
Coal Flow 31	Coal Flow kpph

2/2/2010 17:30	74.41
2/2/2010 17:31	74.22
2/2/2010 17:32	74.43
2/2/2010 17:33	74.68
2/2/2010 17:34	74.48
2/2/2010 17:35	74.48
2/2/2010 17:36	74.35
2/2/2010 17:37	74.16
2/2/2010 17:38	74.19
2/2/2010 17:39	74.22
2/2/2010 17:40	74.26
2/2/2010 17:41	74.46
2/2/2010 17:42	74.76
2/2/2010 17:43	74.62
2/2/2010 17:44	74.43
2/2/2010 17:45	74.55
2/2/2010 17:46	74.57
2/2/2010 17:47	74.43
2/2/2010 17:48	74.44
2/2/2010 17:49	74.66
2/2/2010 17:50	74.59
2/2/2010 17:51	74.25
2/2/2010 17:52	74.22
2/2/2010 17:53	74.41
2/2/2010 17:54	74.74
2/2/2010 17:55	74.74
2/2/2010 17:56	74.75
2/2/2010 17:57	74.75
2/2/2010 17:58	74.65
2/2/2010 17:59	74.49
2/2/2010 18:00	74.5
2/2/2010 18:01	74.52
2/2/2010 18:02	74.29
2/2/2010 18:03	74.02
2/2/2010 18:04	74.08
2/2/2010 18:05	74.05
2/2/2010 18:06	74.26
2/2/2010 18:07	74.25
2/2/2010 18:08	74.25
2/2/2010 18:09	74.24
2/2/2010 18:10	74.24
2/2/2010 18:11	74.23
2/2/2010 18:12	74.46
2/2/2010 18:13	74.77
2/2/2010 18:14	74.67
2/2/2010 18:15	74.61
2/2/2010 18:16	74.48
2/2/2010 18:17	74.5
2/2/2010 18:18	74.47
2/2/2010 18:19	74.21
2/2/2010 18:20	74.62
2/2/2010 18:21	74.58
2/2/2010 18:22	74.74
2/2/2010 18:23	74.72
2/2/2010 18:24	74.69
2/2/2010 18:25	74.79
2/2/2010 18:26	74.87
2/2/2010 18:27	74.72
2/2/2010 18:28	74.38
2/2/2010 18:29	73.98
2/2/2010 18:30	74.27

Average 74.45623

Run 9	
Coal Flow 31	Coal Flow kpph

2/2/2010 19:44	74.11
2/2/2010 19:45	74.23
2/2/2010 19:46	74.39
2/2/2010 19:47	74.45
2/2/2010 19:48	74.61
2/2/2010 19:49	74.6
2/2/2010 19:50	74.49
2/2/2010 19:51	72.9
2/2/2010 19:52	70.7
2/2/2010 19:53	70.18
2/2/2010 19:54	69.79
2/2/2010 19:55	70.95
2/2/2010 19:56	72.51
2/2/2010 19:57	73.94
2/2/2010 19:58	74.84
2/2/2010 19:59	74.96
2/2/2010 20:00	74.8
2/2/2010 20:01	74.83
2/2/2010 20:02	75.05
2/2/2010 20:03	75.14
2/2/2010 20:04	74.94
2/2/2010 20:05	75.18
2/2/2010 20:06	75.32
2/2/2010 20:07	75.62
2/2/2010 20:08	75.85
2/2/2010 20:09	76
2/2/2010 20:10	76.15
2/2/2010 20:11	76.29
2/2/2010 20:12	76.66
2/2/2010 20:13	76.84
2/2/2010 20:14	76.31
2/2/2010 20:15	76.09
2/2/2010 20:16	76.1
2/2/2010 20:17	76.2
2/2/2010 20:18	76.21
2/2/2010 20:19	75.98
2/2/2010 20:20	75.88
2/2/2010 20:21	75.72
2/2/2010 20:22	75.56
2/2/2010 20:23	75.42
2/2/2010 20:24	75.32
2/2/2010 20:25	75.5
2/2/2010 20:26	75.51
2/2/2010 20:27	75.52
2/2/2010 20:28	75.52
2/2/2010 20:29	75.53
2/2/2010 20:30	75.47
2/2/2010 20:31	75.16
2/2/2010 20:32	74.95
2/2/2010 20:33	75.01
2/2/2010 20:34	74.71
2/2/2010 20:35	74.51
2/2/2010 20:36	74.59
2/2/2010 20:37	74.66
2/2/2010 20:38	74.5
2/2/2010 20:39	74.64
2/2/2010 20:40	74.64
2/2/2010 20:41	74.32
2/2/2010 20:42	74.46
2/2/2010 20:43	74.64
2/2/2010 20:44	74.53

Average 74.81115

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/2/2010 6:35	55.79	2/2/2010 9:02	55.55	2/2/2010 13:04	56.34	2/2/2010 17:30	76.39	2/2/2010 19:44	76.07
2/2/2010 6:36	55.69	2/2/2010 9:03	55.71	2/2/2010 13:05	56.09	2/2/2010 17:31	76.44	2/2/2010 19:45	76.2
2/2/2010 6:37	55.58	2/2/2010 9:04	55.9	2/2/2010 13:06	56.1	2/2/2010 17:32	76.58	2/2/2010 19:46	76.12
2/2/2010 6:38	55.56	2/2/2010 9:05	55.8	2/2/2010 13:07	56.21	2/2/2010 17:33	76.51	2/2/2010 19:47	76.29
2/2/2010 6:39	55.7	2/2/2010 9:06	55.9	2/2/2010 13:08	56.35	2/2/2010 17:34	76.44	2/2/2010 19:48	76.57
2/2/2010 6:40	55.85	2/2/2010 9:07	55.72	2/2/2010 13:09	56.33	2/2/2010 17:35	76.24	2/2/2010 19:49	76.46
2/2/2010 6:41	55.75	2/2/2010 9:08	55.69	2/2/2010 13:10	56.31	2/2/2010 17:36	76.08	2/2/2010 19:50	76.46
2/2/2010 6:42	55.41	2/2/2010 9:09	55.53	2/2/2010 13:11	56.04	2/2/2010 17:37	76.16	2/2/2010 19:51	75.05
2/2/2010 6:43	55.44	2/2/2010 9:10	55.58	2/2/2010 13:12	55.92	2/2/2010 17:38	76.21	2/2/2010 19:52	72.64
2/2/2010 6:44	55.52	2/2/2010 9:11	55.87	2/2/2010 13:13	56.52	2/2/2010 17:39	76.37	2/2/2010 19:53	72
2/2/2010 6:45	55.7	2/2/2010 9:12	55.84	2/2/2010 13:14	57.55	2/2/2010 17:40	76.2	2/2/2010 19:54	71.52
2/2/2010 6:46	56.06	2/2/2010 9:13	55.9	2/2/2010 13:15	58.28	2/2/2010 17:41	76.28	2/2/2010 19:55	72.66
2/2/2010 6:47	56.44	2/2/2010 9:14	56.07	2/2/2010 13:16	59.79	2/2/2010 17:42	76.53	2/2/2010 19:56	74.38
2/2/2010 6:48	56.21	2/2/2010 9:15	56.09	2/2/2010 13:17	61.45	2/2/2010 17:43	76.42	2/2/2010 19:57	75.63
2/2/2010 6:49	56.04	2/2/2010 9:16	55.95	2/2/2010 13:18	62.99	2/2/2010 17:44	76.35	2/2/2010 19:58	76.64
2/2/2010 6:50	55.97	2/2/2010 9:17	55.68	2/2/2010 13:19	64.74	2/2/2010 17:45	76.33	2/2/2010 19:59	76.76
2/2/2010 6:51	55.91	2/2/2010 9:18	55.71	2/2/2010 13:20	65.67	2/2/2010 17:46	76.32	2/2/2010 20:00	76.64
2/2/2010 6:52	55.75	2/2/2010 9:19	55.85	2/2/2010 13:21	65.67	2/2/2010 17:47	76.3	2/2/2010 20:01	76.77
2/2/2010 6:53	55.52	2/2/2010 9:20	56.11	2/2/2010 13:22	65.96	2/2/2010 17:48	76.28	2/2/2010 20:02	76.9
2/2/2010 6:54	55.37	2/2/2010 9:21	56.18	2/2/2010 13:23	66.77	2/2/2010 17:49	76.26	2/2/2010 20:03	76.92
2/2/2010 6:55	55.24	2/2/2010 9:22	56.22	2/2/2010 13:24	67.74	2/2/2010 17:50	76.25	2/2/2010 20:04	76.9
2/2/2010 6:56	55.3	2/2/2010 9:23	56.18	2/2/2010 13:25	68.77	2/2/2010 17:51	76.23	2/2/2010 20:05	77.05
2/2/2010 6:57	55.35	2/2/2010 9:24	56.14	2/2/2010 13:26	69.47	2/2/2010 17:52	76.18	2/2/2010 20:06	77.3
2/2/2010 6:58	55.65	2/2/2010 9:25	56.14	2/2/2010 13:27	70.25	2/2/2010 17:53	76.22	2/2/2010 20:07	77.48
2/2/2010 6:59	55.1	2/2/2010 9:26	56.21	2/2/2010 13:28	70.98	2/2/2010 17:54	76.5	2/2/2010 20:08	77.61
2/2/2010 7:00	55.32	2/2/2010 9:27	56.2	2/2/2010 13:29	71.38	2/2/2010 17:55	76.77	2/2/2010 20:09	78.04
2/2/2010 7:01	55.54	2/2/2010 9:28	56.03	2/2/2010 13:30	71.69	2/2/2010 17:56	76.78	2/2/2010 20:10	78.11
2/2/2010 7:02	55.84	2/2/2010 9:29	55.92	2/2/2010 13:31	72.52	2/2/2010 17:57	76.61	2/2/2010 20:11	78
2/2/2010 7:03	56.09	2/2/2010 9:30	55.89	2/2/2010 13:32	73.44	2/2/2010 17:58	76.71	2/2/2010 20:12	78
2/2/2010 7:04	55.93	2/2/2010 9:31	55.8	2/2/2010 13:33	72.96	2/2/2010 17:59	76.47	2/2/2010 20:13	77.99
2/2/2010 7:05	55.85	2/2/2010 9:32	55.7	2/2/2010 13:34	72.98	2/2/2010 18:00	76.29	2/2/2010 20:14	77.86
2/2/2010 7:06	55.79	2/2/2010 9:33	55.89	2/2/2010 13:35	72.29	2/2/2010 18:01	76.47	2/2/2010 20:15	77.93
2/2/2010 7:07	55.63	2/2/2010 9:34	56.03	2/2/2010 13:36	71.43	2/2/2010 18:02	76.29	2/2/2010 20:16	77.85
2/2/2010 7:08	55.73	2/2/2010 9:35	55.99	2/2/2010 13:37	71.16	2/2/2010 18:03	76.04	2/2/2010 20:17	77.81
2/2/2010 7:09	55.75	2/2/2010 9:36	56.15	2/2/2010 13:38	71.36	2/2/2010 18:04	76.24	2/2/2010 20:18	77.85
2/2/2010 7:10	55.6	2/2/2010 9:37	55.98	2/2/2010 13:39	72.15	2/2/2010 18:05	76.02	2/2/2010 20:19	77.71
2/2/2010 7:11	55.48	2/2/2010 9:38	55.8	2/2/2010 13:40	72.81	2/2/2010 18:06	76.14	2/2/2010 20:20	77.87
2/2/2010 7:12	55.43	2/2/2010 9:39	55.7	2/2/2010 13:41	73.71	2/2/2010 18:07	76.26	2/2/2010 20:21	77.56
2/2/2010 7:13	55.39	2/2/2010 9:40	55.74	2/2/2010 13:42	74.5	2/2/2010 18:08	76.28	2/2/2010 20:22	77.28
2/2/2010 7:14	55.47	2/2/2010 9:41	55.68	2/2/2010 13:43	75.43	2/2/2010 18:09	76.26	2/2/2010 20:23	77.27
2/2/2010 7:15	55.64	2/2/2010 9:42	55.59	2/2/2010 13:44	76.36	2/2/2010 18:10	76.28	2/2/2010 20:24	77.28
2/2/2010 7:16	55.51	2/2/2010 9:43	55.62	2/2/2010 13:45	77.29	2/2/2010 18:11	76.2	2/2/2010 20:25	77.5
2/2/2010 7:17	55.38	2/2/2010 9:44	55.51	2/2/2010 13:46	78.01	2/2/2010 18:12	76.35	2/2/2010 20:26	77.5
2/2/2010 7:18	55.26	2/2/2010 9:45	55.57	2/2/2010 13:47	78.17	2/2/2010 18:13	76.5	2/2/2010 20:27	77.28
2/2/2010 7:19	55.45	2/2/2010 9:46	55.49	2/2/2010 13:48	78.17	2/2/2010 18:14	76.49	2/2/2010 20:28	76.99
2/2/2010 7:20	55.94	2/2/2010 9:47	55.63	2/2/2010 13:49	78.27	2/2/2010 18:15	76.41	2/2/2010 20:29	77.1
2/2/2010 7:21	55.81	2/2/2010 9:48	55.88	2/2/2010 13:50	78.21	2/2/2010 18:16	76.46	2/2/2010 20:30	77.21
2/2/2010 7:22	55.78	2/2/2010 9:49	56.19	2/2/2010 13:51	78.15	2/2/2010 18:17	76.41	2/2/2010 20:31	77.11
2/2/2010 7:23	55.93	2/2/2010 9:50	56.24	2/2/2010 13:52	78.09	2/2/2010 18:18	76.22	2/2/2010 20:32	76.82
2/2/2010 7:24	55.99	2/2/2010 9:51	56.19	2/2/2010 13:53	78.02	2/2/2010 18:19	76.06	2/2/2010 20:33	76.75
2/2/2010 7:25	55.95	2/2/2010 9:52	56.03	2/2/2010 13:54	77.97	2/2/2010 18:20	76.72	2/2/2010 20:34	76.68
2/2/2010 7:26	56.11	2/2/2010 9:53	56.15	2/2/2010 13:55	78.03	2/2/2010 18:21	76.72	2/2/2010 20:35	76.52
2/2/2010 7:27	56.18	2/2/2010 9:54	56.26	2/2/2010 13:56	78.13	2/2/2010 18:22	76.64	2/2/2010 20:36	76.52
2/2/2010 7:28	56.06	2/2/2010 9:55	56.05	2/2/2010 13:57	77.97	2/2/2010 18:23	76.46	2/2/2010 20:37	76.69
2/2/2010 7:29	55.95	2/2/2010 9:56	55.96	2/2/2010 13:58	78.02	2/2/2010 18:24	76.56	2/2/2010 20:38	76.48
2/2/2010 7:30	55.91	2/2/2010 9:57	55.86	2/2/2010 13:59	78.27	2/2/2010 18:25	76.78	2/2/2010 20:39	76.49
2/2/2010 7:31	56.04	2/2/2010 9:58	55.95	2/2/2010 14:00	78.15	2/2/2010 18:26	76.49	2/2/2010 20:40	76.53
2/2/2010 7:32	56.09	2/2/2010 9:59	56.13	2/2/2010 14:01	78.01	2/2/2010 18:27	76.5	2/2/2010 20:41	76.3
2/2/2010 7:33	56.08	2/2/2010 10:00	56.04	2/2/2010 14:02	78.01	2/2/2010 18:28	76.44	2/2/2010 20:42	76.35
2/2/2010 7:34	56.13	2/2/2010 10:01	56.12	2/2/2010 14:03	77.93	2/2/2010 18:29	75.97	2/2/2010 20:43	76.4
2/2/2010 7:35	55.96	2/2/2010 10:02	56.03	2/2/2010 14:04	77.96	2/2/2010 18:30	76.26	2/2/2010 20:44	76.26
Average	55.7359	Average	55.91	Average	69.92279	Average	76.37082	Average	76.63787

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/2/2010 6:35	55.78	2/2/2010 9:02	55.46	2/2/2010 13:04	56.28	2/2/2010 17:30	76.2	2/2/2010 19:44	75.84
2/2/2010 6:36	55.78	2/2/2010 9:03	55.72	2/2/2010 13:05	56.05	2/2/2010 17:31	76.31	2/2/2010 19:45	75.84
2/2/2010 6:37	55.79	2/2/2010 9:04	55.93	2/2/2010 13:06	56.16	2/2/2010 17:32	76.64	2/2/2010 19:46	76.02
2/2/2010 6:38	55.81	2/2/2010 9:05	55.72	2/2/2010 13:07	56.06	2/2/2010 17:33	76.62	2/2/2010 19:47	76.48
2/2/2010 6:39	55.82	2/2/2010 9:06	55.71	2/2/2010 13:08	56.05	2/2/2010 17:34	76.24	2/2/2010 19:48	76.69
2/2/2010 6:40	55.84	2/2/2010 9:07	55.7	2/2/2010 13:09	56.19	2/2/2010 17:35	76.19	2/2/2010 19:49	76.5
2/2/2010 6:41	55.79	2/2/2010 9:08	55.63	2/2/2010 13:10	56.33	2/2/2010 17:36	76.14	2/2/2010 19:50	76.31
2/2/2010 6:42	55.62	2/2/2010 9:09	55.56	2/2/2010 13:11	56.24	2/2/2010 17:37	76.09	2/2/2010 19:51	74.74
2/2/2010 6:43	55.46	2/2/2010 9:10	55.76	2/2/2010 13:12	56.07	2/2/2010 17:38	76.18	2/2/2010 19:52	72.47
2/2/2010 6:44	55.46	2/2/2010 9:11	55.96	2/2/2010 13:13	56.67	2/2/2010 17:39	76.32	2/2/2010 19:53	71.95
2/2/2010 6:45	55.65	2/2/2010 9:12	55.98	2/2/2010 13:14	57.52	2/2/2010 17:40	76.19	2/2/2010 19:54	71.57
2/2/2010 6:46	55.84	2/2/2010 9:13	55.93	2/2/2010 13:15	58.29	2/2/2010 17:41	76.24	2/2/2010 19:55	72.83
2/2/2010 6:47	56.4	2/2/2010 9:14	56.1	2/2/2010 13:16	59.71	2/2/2010 17:42	76.44	2/2/2010 19:56	74.52
2/2/2010 6:48	56.43	2/2/2010 9:15	55.95	2/2/2010 13:17	61.51	2/2/2010 17:43	76.43	2/2/2010 19:57	75.79
2/2/2010 6:49	56.26	2/2/2010 9:16	55.94	2/2/2010 13:18	62.93	2/2/2010 17:44	76.42	2/2/2010 19:58	76.67
2/2/2010 6:50	56.09	2/2/2010 9:17	55.75	2/2/2010 13:19	64.44	2/2/2010 17:45	76.42	2/2/2010 19:59	76.88
2/2/2010 6:51	56.04	2/2/2010 9:18	55.71	2/2/2010 13:20	65.51	2/2/2010 17:46	76.41	2/2/2010 20:00	76.56
2/2/2010 6:52	55.92	2/2/2010 9:19	55.96	2/2/2010 13:21	65.59	2/2/2010 17:47	76.4	2/2/2010 20:01	76.64
2/2/2010 6:53	55.45	2/2/2010 9:20	56.1	2/2/2010 13:22	65.94	2/2/2010 17:48	76.39	2/2/2010 20:02	76.93
2/2/2010 6:54	55.33	2/2/2010 9:21	56.07	2/2/2010 13:23	66.76	2/2/2010 17:49	76.38	2/2/2010 20:03	76.99
2/2/2010 6:55	55.23	2/2/2010 9:22	56.03	2/2/2010 13:24	67.89	2/2/2010 17:50	76.32	2/2/2010 20:04	76.88
2/2/2010 6:56	55.19	2/2/2010 9:23	55.99	2/2/2010 13:25	69.08	2/2/2010 17:51	76.17	2/2/2010 20:05	77.09
2/2/2010 6:57	55.35	2/2/2010 9:24	56.09	2/2/2010 13:26	69.49	2/2/2010 17:52	76.16	2/2/2010 20:06	77.39
2/2/2010 6:58	55.54	2/2/2010 9:25	56.23	2/2/2010 13:27	70	2/2/2010 17:53	76.4	2/2/2010 20:07	77.54
2/2/2010 6:59	55.19	2/2/2010 9:26	56.13	2/2/2010 13:28	70.7	2/2/2010 17:54	76.63	2/2/2010 20:08	77.61
2/2/2010 7:00	55.41	2/2/2010 9:27	56.17	2/2/2010 13:29	71.4	2/2/2010 17:55	76.79	2/2/2010 20:09	78.01
2/2/2010 7:01	55.83	2/2/2010 9:28	55.96	2/2/2010 13:30	71.99	2/2/2010 17:56	76.71	2/2/2010 20:10	78.04
2/2/2010 7:02	55.9	2/2/2010 9:29	55.86	2/2/2010 13:31	72.82	2/2/2010 17:57	76.66	2/2/2010 20:11	78
2/2/2010 7:03	56.07	2/2/2010 9:30	55.95	2/2/2010 13:32	73.48	2/2/2010 17:58	76.73	2/2/2010 20:12	77.97
2/2/2010 7:04	55.87	2/2/2010 9:31	55.92	2/2/2010 13:33	73.05	2/2/2010 17:59	76.51	2/2/2010 20:13	77.99
2/2/2010 7:05	55.71	2/2/2010 9:32	55.81	2/2/2010 13:34	72.9	2/2/2010 18:00	76.47	2/2/2010 20:14	77.84
2/2/2010 7:06	55.67	2/2/2010 9:33	55.95	2/2/2010 13:35	72.09	2/2/2010 18:01	76.58	2/2/2010 20:15	77.88
2/2/2010 7:07	55.63	2/2/2010 9:34	56.03	2/2/2010 13:36	71.36	2/2/2010 18:02	76.21	2/2/2010 20:16	77.93
2/2/2010 7:08	55.67	2/2/2010 9:35	55.99	2/2/2010 13:37	70.94	2/2/2010 18:03	75.89	2/2/2010 20:17	77.71
2/2/2010 7:09	55.6	2/2/2010 9:36	55.95	2/2/2010 13:38	71.13	2/2/2010 18:04	76.04	2/2/2010 20:18	77.75
2/2/2010 7:10	55.29	2/2/2010 9:37	55.9	2/2/2010 13:39	71.93	2/2/2010 18:05	75.87	2/2/2010 20:19	77.89
2/2/2010 7:11	55.45	2/2/2010 9:38	55.86	2/2/2010 13:40	72.98	2/2/2010 18:06	76.13	2/2/2010 20:20	77.96
2/2/2010 7:12	55.4	2/2/2010 9:39	55.92	2/2/2010 13:41	73.83	2/2/2010 18:07	76.29	2/2/2010 20:21	77.69
2/2/2010 7:13	55.35	2/2/2010 9:40	55.92	2/2/2010 13:42	74.69	2/2/2010 18:08	76.3	2/2/2010 20:22	77.49
2/2/2010 7:14	55.47	2/2/2010 9:41	55.65	2/2/2010 13:43	75.55	2/2/2010 18:09	76.3	2/2/2010 20:23	77.4
2/2/2010 7:15	55.73	2/2/2010 9:42	55.69	2/2/2010 13:44	76.4	2/2/2010 18:10	76.39	2/2/2010 20:24	77.49
2/2/2010 7:16	55.56	2/2/2010 9:43	55.72	2/2/2010 13:45	77.33	2/2/2010 18:11	76.43	2/2/2010 20:25	77.56
2/2/2010 7:17	55.4	2/2/2010 9:44	55.84	2/2/2010 13:46	78.17	2/2/2010 18:12	76.32	2/2/2010 20:26	77.31
2/2/2010 7:18	55.31	2/2/2010 9:45	55.93	2/2/2010 13:47	78.39	2/2/2010 18:13	76.46	2/2/2010 20:27	77.25
2/2/2010 7:19	55.44	2/2/2010 9:46	55.7	2/2/2010 13:48	78.2	2/2/2010 18:14	76.59	2/2/2010 20:28	77.19
2/2/2010 7:20	55.74	2/2/2010 9:47	55.6	2/2/2010 13:49	78.13	2/2/2010 18:15	76.58	2/2/2010 20:29	77.24
2/2/2010 7:21	55.93	2/2/2010 9:48	55.85	2/2/2010 13:50	78.27	2/2/2010 18:16	76.35	2/2/2010 20:30	77.27
2/2/2010 7:22	55.47	2/2/2010 9:49	56.15	2/2/2010 13:51	78.31	2/2/2010 18:17	76.39	2/2/2010 20:31	77.07
2/2/2010 7:23	55.91	2/2/2010 9:50	56.1	2/2/2010 13:52	78.18	2/2/2010 18:18	76.22	2/2/2010 20:32	76.95
2/2/2010 7:24	55.9	2/2/2010 9:51	56.06	2/2/2010 13:53	78.06	2/2/2010 18:19	75.95	2/2/2010 20:33	76.84
2/2/2010 7:25	55.89	2/2/2010 9:52	56.07	2/2/2010 13:54	78.07	2/2/2010 18:20	76.68	2/2/2010 20:34	76.56
2/2/2010 7:26	55.93	2/2/2010 9:53	56.2	2/2/2010 13:55	78.23	2/2/2010 18:21	76.73	2/2/2010 20:35	76.42
2/2/2010 7:27	56.07	2/2/2010 9:54	56.26	2/2/2010 13:56	78.19	2/2/2010 18:22	76.67	2/2/2010 20:36	76.51
2/2/2010 7:28	56.04	2/2/2010 9:55	56.2	2/2/2010 13:57	78.28	2/2/2010 18:23	76.62	2/2/2010 20:37	76.65
2/2/2010 7:29	55.88	2/2/2010 9:56	56.15	2/2/2010 13:58	78.44	2/2/2010 18:24	76.63	2/2/2010 20:38	76.52
2/2/2010 7:30	56.01	2/2/2010 9:57	56.09	2/2/2010 13:59	78.4	2/2/2010 18:25	76.75	2/2/2010 20:39	76.3
2/2/2010 7:31	56.15	2/2/2010 9:58	56.1	2/2/2010 14:00	78.27	2/2/2010 18:26	76.6	2/2/2010 20:40	76.45
2/2/2010 7:32	56.2	2/2/2010 9:59	56.09	2/2/2010 14:01	78.16	2/2/2010 18:27	76.48	2/2/2010 20:41	76.21
2/2/2010 7:33	56.09	2/2/2010 10:00	55.97	2/2/2010 14:02	78.15	2/2/2010 18:28	76.53	2/2/2010 20:42	76.23
2/2/2010 7:34	56.07	2/2/2010 10:01	56.02	2/2/2010 14:03	78.04	2/2/2010 18:29	76.14	2/2/2010 20:43	76.38
2/2/2010 7:35	56.01	2/2/2010 10:02	56.14	2/2/2010 14:04	78.18	2/2/2010 18:30	76.4	2/2/2010 20:44	76.31
Average	55.74856	Average	55.93246	Average	69.9582	Average	76.38895	Average	76.63918

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/2/2010 6:35	55.65	2/2/2010 9:02	55.78	2/2/2010 13:04	56.54	2/2/2010 17:30	76.4	2/2/2010 19:44	75.93
2/2/2010 6:36	55.65	2/2/2010 9:03	55.77	2/2/2010 13:05	56.49	2/2/2010 17:31	76.4	2/2/2010 19:45	76
2/2/2010 6:37	55.64	2/2/2010 9:04	55.75	2/2/2010 13:06	56.44	2/2/2010 17:32	76.41	2/2/2010 19:46	76.06
2/2/2010 6:38	55.63	2/2/2010 9:05	55.73	2/2/2010 13:07	56.39	2/2/2010 17:33	76.41	2/2/2010 19:47	76.13
2/2/2010 6:39	55.62	2/2/2010 9:06	55.69	2/2/2010 13:08	56.34	2/2/2010 17:34	76.42	2/2/2010 19:48	76.2
2/2/2010 6:40	55.62	2/2/2010 9:07	55.64	2/2/2010 13:09	56.29	2/2/2010 17:35	76.42	2/2/2010 19:49	76.26
2/2/2010 6:41	55.61	2/2/2010 9:08	55.6	2/2/2010 13:10	56.24	2/2/2010 17:36	76.43	2/2/2010 19:50	76.33
2/2/2010 6:42	55.6	2/2/2010 9:09	55.56	2/2/2010 13:11	56.19	2/2/2010 17:37	76.44	2/2/2010 19:51	74.88
2/2/2010 6:43	55.59	2/2/2010 9:10	55.54	2/2/2010 13:12	56.14	2/2/2010 17:38	76.44	2/2/2010 19:52	72.55
2/2/2010 6:44	55.59	2/2/2010 9:11	55.57	2/2/2010 13:13	56.47	2/2/2010 17:39	76.45	2/2/2010 19:53	71.97
2/2/2010 6:45	55.58	2/2/2010 9:12	55.59	2/2/2010 13:14	57.45	2/2/2010 17:40	76.45	2/2/2010 19:54	71.49
2/2/2010 6:46	55.57	2/2/2010 9:13	55.62	2/2/2010 13:15	58.43	2/2/2010 17:41	76.46	2/2/2010 19:55	72.59
2/2/2010 6:47	55.57	2/2/2010 9:14	55.64	2/2/2010 13:16	59.63	2/2/2010 17:42	76.47	2/2/2010 19:56	74.14
2/2/2010 6:48	55.56	2/2/2010 9:15	55.67	2/2/2010 13:17	61.21	2/2/2010 17:43	76.47	2/2/2010 19:57	75.69
2/2/2010 6:49	55.55	2/2/2010 9:16	55.69	2/2/2010 13:18	62.8	2/2/2010 17:44	76.48	2/2/2010 19:58	76.66
2/2/2010 6:50	55.54	2/2/2010 9:17	55.72	2/2/2010 13:19	64.38	2/2/2010 17:45	76.49	2/2/2010 19:59	76.75
2/2/2010 6:51	55.54	2/2/2010 9:18	55.74	2/2/2010 13:20	65.52	2/2/2010 17:46	76.5	2/2/2010 20:00	76.84
2/2/2010 6:52	55.53	2/2/2010 9:19	55.77	2/2/2010 13:21	65.89	2/2/2010 17:47	76.51	2/2/2010 20:01	76.92
2/2/2010 6:53	55.52	2/2/2010 9:20	55.79	2/2/2010 13:22	66.25	2/2/2010 17:48	76.52	2/2/2010 20:02	77.01
2/2/2010 6:54	55.51	2/2/2010 9:21	55.82	2/2/2010 13:23	66.84	2/2/2010 17:49	76.53	2/2/2010 20:03	77.09
2/2/2010 6:55	55.51	2/2/2010 9:22	55.84	2/2/2010 13:24	67.82	2/2/2010 17:50	76.53	2/2/2010 20:04	77.18
2/2/2010 6:56	55.5	2/2/2010 9:23	55.87	2/2/2010 13:25	68.8	2/2/2010 17:51	76.54	2/2/2010 20:05	77.27
2/2/2010 6:57	55.49	2/2/2010 9:24	55.89	2/2/2010 13:26	69.62	2/2/2010 17:52	76.55	2/2/2010 20:06	77.35
2/2/2010 6:58	55.48	2/2/2010 9:25	55.92	2/2/2010 13:27	70.17	2/2/2010 17:53	76.56	2/2/2010 20:07	77.44
2/2/2010 6:59	55.48	2/2/2010 9:26	55.94	2/2/2010 13:28	70.73	2/2/2010 17:54	76.57	2/2/2010 20:08	77.52
2/2/2010 7:00	55.47	2/2/2010 9:27	55.96	2/2/2010 13:29	71.28	2/2/2010 17:55	76.58	2/2/2010 20:09	77.6
2/2/2010 7:01	55.46	2/2/2010 9:28	55.97	2/2/2010 13:30	71.84	2/2/2010 17:56	76.59	2/2/2010 20:10	77.69
2/2/2010 7:02	55.45	2/2/2010 9:29	55.95	2/2/2010 13:31	72.8	2/2/2010 17:57	76.59	2/2/2010 20:11	77.77
2/2/2010 7:03	55.45	2/2/2010 9:30	55.92	2/2/2010 13:32	73.68	2/2/2010 17:58	76.6	2/2/2010 20:12	77.85
2/2/2010 7:04	55.44	2/2/2010 9:31	55.89	2/2/2010 13:33	73.23	2/2/2010 17:59	76.61	2/2/2010 20:13	77.93
2/2/2010 7:05	55.43	2/2/2010 9:32	55.87	2/2/2010 13:34	72.78	2/2/2010 18:00	76.62	2/2/2010 20:14	78.01
2/2/2010 7:06	55.42	2/2/2010 9:33	55.84	2/2/2010 13:35	72.34	2/2/2010 18:01	76.63	2/2/2010 20:15	78.1
2/2/2010 7:07	55.42	2/2/2010 9:34	55.82	2/2/2010 13:36	71.89	2/2/2010 18:02	76.61	2/2/2010 20:16	78.11
2/2/2010 7:08	55.41	2/2/2010 9:35	55.79	2/2/2010 13:37	71.44	2/2/2010 18:03	76.64	2/2/2010 20:17	78.03
2/2/2010 7:09	55.4	2/2/2010 9:36	55.76	2/2/2010 13:38	71.47	2/2/2010 18:04	76.31	2/2/2010 20:18	77.96
2/2/2010 7:10	55.39	2/2/2010 9:37	55.74	2/2/2010 13:39	72.29	2/2/2010 18:05	76.33	2/2/2010 20:19	77.88
2/2/2010 7:11	55.39	2/2/2010 9:38	55.71	2/2/2010 13:40	73.12	2/2/2010 18:06	76.35	2/2/2010 20:20	77.8
2/2/2010 7:12	55.38	2/2/2010 9:39	55.69	2/2/2010 13:41	73.95	2/2/2010 18:07	76.37	2/2/2010 20:21	77.72
2/2/2010 7:13	55.37	2/2/2010 9:40	55.66	2/2/2010 13:42	74.77	2/2/2010 18:08	76.39	2/2/2010 20:22	77.64
2/2/2010 7:14	55.36	2/2/2010 9:41	55.63	2/2/2010 13:43	75.6	2/2/2010 18:09	76.41	2/2/2010 20:23	77.56
2/2/2010 7:15	55.36	2/2/2010 9:42	55.61	2/2/2010 13:44	76.42	2/2/2010 18:10	76.43	2/2/2010 20:24	77.48
2/2/2010 7:16	55.35	2/2/2010 9:43	55.58	2/2/2010 13:45	77.19	2/2/2010 18:11	76.45	2/2/2010 20:25	77.4
2/2/2010 7:17	55.34	2/2/2010 9:44	55.56	2/2/2010 13:46	77.85	2/2/2010 18:12	76.47	2/2/2010 20:26	77.32
2/2/2010 7:18	55.35	2/2/2010 9:45	55.53	2/2/2010 13:47	78.25	2/2/2010 18:13	76.5	2/2/2010 20:27	77.25
2/2/2010 7:19	55.41	2/2/2010 9:46	55.54	2/2/2010 13:48	78.23	2/2/2010 18:14	76.52	2/2/2010 20:28	77.17
2/2/2010 7:20	55.46	2/2/2010 9:47	55.62	2/2/2010 13:49	78.2	2/2/2010 18:15	76.54	2/2/2010 20:29	77.09
2/2/2010 7:21	55.51	2/2/2010 9:48	55.7	2/2/2010 13:50	78.18	2/2/2010 18:16	76.58	2/2/2010 20:30	77.01
2/2/2010 7:22	55.56	2/2/2010 9:49	55.78	2/2/2010 13:51	78.15	2/2/2010 18:17	76.65	2/2/2010 20:31	76.93
2/2/2010 7:23	55.61	2/2/2010 9:50	55.87	2/2/2010 13:52	78.13	2/2/2010 18:18	76.29	2/2/2010 20:32	76.85
2/2/2010 7:24	55.67	2/2/2010 9:51	55.95	2/2/2010 13:53	78.1	2/2/2010 18:19	75.79	2/2/2010 20:33	76.77
2/2/2010 7:25	55.72	2/2/2010 9:52	56.03	2/2/2010 13:54	78.08	2/2/2010 18:20	76.15	2/2/2010 20:34	76.72
2/2/2010 7:26	55.77	2/2/2010 9:53	56.11	2/2/2010 13:55	78.06	2/2/2010 18:21	76.52	2/2/2010 20:35	76.7
2/2/2010 7:27	55.82	2/2/2010 9:54	56.19	2/2/2010 13:56	78.03	2/2/2010 18:22	76.76	2/2/2010 20:36	76.67
2/2/2010 7:28	55.87	2/2/2010 9:55	56.23	2/2/2010 13:57	78.01	2/2/2010 18:23	76.82	2/2/2010 20:37	76.65
2/2/2010 7:29	55.93	2/2/2010 9:56	56.2	2/2/2010 13:58	77.98	2/2/2010 18:24	76.87	2/2/2010 20:38	76.63
2/2/2010 7:30	55.98	2/2/2010 9:57	56.16	2/2/2010 13:59	77.96	2/2/2010 18:25	76.93	2/2/2010 20:39	76.61
2/2/2010 7:31	56.03	2/2/2010 9:58	56.13	2/2/2010 14:00	77.93	2/2/2010 18:26	76.69	2/2/2010 20:40	76.59
2/2/2010 7:32	56.03	2/2/2010 9:59	56.1	2/2/2010 14:01	77.91	2/2/2010 18:27	76.43	2/2/2010 20:41	76.57
2/2/2010 7:33	55.93	2/2/2010 10:00	56.06	2/2/2010 14:02	77.88	2/2/2010 18:28	76.57	2/2/2010 20:42	76.55
2/2/2010 7:34	55.84	2/2/2010 10:01	56.03	2/2/2010 14:03	77.86	2/2/2010 18:29	76.32	2/2/2010 20:43	76.53
2/2/2010 7:35	55.74	2/2/2010 10:02	56	2/2/2010 14:04	77.84	2/2/2010 18:30	76.17	2/2/2010 20:44	76.51
Average	55.56803	Average	55.80852	Average	69.96377	Average	76.47098	Average	76.6541

Total SUM	220.898	Total SUM	221.7011	Total SUM	278.5669	Total SUM	303.6869	Total SUM	304.7423
-----------	---------	-----------	----------	-----------	----------	-----------	----------	-----------	----------

OPACITY - UNIT 3

Run 5	
Date/Time	MPP3 OPACITY Value
02/02/2010 06:30	4.05
02/02/2010 06:36	4.22
02/02/2010 06:42	4.12
02/02/2010 06:48	4.03
02/02/2010 06:54	3.90
02/02/2010 07:00	4.02
02/02/2010 07:06	3.85
02/02/2010 07:12	4.04
02/02/2010 07:18	4.19
02/02/2010 07:24	4.11
02/02/2010 07:30	4.17
02/02/2010 07:36	4.06

Run 6	
Date/Time	MPP3 OPACITY Value
02/02/2010 09:00	4.02
02/02/2010 09:06	4.18
02/02/2010 09:12	4.29
02/02/2010 09:18	4.30
02/02/2010 09:24	4.26
02/02/2010 09:30	4.22
02/02/2010 09:36	4.37
02/02/2010 09:42	4.20
02/02/2010 09:48	4.12
02/02/2010 09:54	4.44
02/02/2010 10:00	4.28
02/02/2010 10:06	4.30

Run 7	
Date/Time	MPP3 OPACITY Value
02/02/2010 13:00	4.01
02/02/2010 13:06	4.32
02/02/2010 13:12	4.18
02/02/2010 13:18	4.17
02/02/2010 13:24	4.42
02/02/2010 13:30	5.00
02/02/2010 13:36	5.34
02/02/2010 13:42	5.97
02/02/2010 13:48	5.86
02/02/2010 13:54	6.10
02/02/2010 14:00	6.19
02/02/2010 14:06	6.06

Run 8	
Date/Time	MPP3 OPACITY Value
02/02/2010 17:30	6.23
02/02/2010 17:36	6.28
02/02/2010 17:42	6.36
02/02/2010 17:48	6.36
02/02/2010 17:54	6.43
02/02/2010 18:00	6.23
02/02/2010 18:06	6.54
02/02/2010 18:12	6.41
02/02/2010 18:18	6.41
02/02/2010 18:24	6.57
02/02/2010 18:30	6.54

OPACITY - UNIT 3

Run 9	
Date/Time	MPP3 OPACITY Value
02/02/2010 19:42	6.32
02/02/2010 19:48	6.36
02/02/2010 19:54	6.90
02/02/2010 20:00	6.56
02/02/2010 20:06	6.35
02/02/2010 20:12	6.30
02/02/2010 20:18	6.79
02/02/2010 20:24	6.42
02/02/2010 20:30	6.54
02/02/2010 20:36	6.58
02/02/2010 20:42	6.37
02/02/2010 20:48	6.56

05
00

February 3, 2010

Unit 3 Sorbent Injection - Common, APH, and ESP Feeder

Run 10		Run 11		Run 12	
Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr
2/3/2010 8:45	120	2/3/2010 12:55	360	2/3/2010 17:25	243
2/3/2010 8:46	120	2/3/2010 12:56	360	2/3/2010 17:26	243
2/3/2010 8:47	120	2/3/2010 12:57	360	2/3/2010 17:27	243
2/3/2010 8:48	120	2/3/2010 12:58	360	2/3/2010 17:28	244
2/3/2010 8:49	120	2/3/2010 12:59	360	2/3/2010 17:29	244
2/3/2010 8:50	120	2/3/2010 13:00	360	2/3/2010 17:30	244
2/3/2010 8:51	120	2/3/2010 13:01	360	2/3/2010 17:31	245
2/3/2010 8:52	120	2/3/2010 13:02	360	2/3/2010 17:32	245
2/3/2010 8:53	120	2/3/2010 13:03	360	2/3/2010 17:33	245
2/3/2010 8:54	120	2/3/2010 13:04	361	2/3/2010 17:34	245
2/3/2010 8:55	120	2/3/2010 13:05	361	2/3/2010 17:35	245
2/3/2010 8:56	120	2/3/2010 13:06	361	2/3/2010 17:36	245
2/3/2010 8:57	120	2/3/2010 13:07	361	2/3/2010 17:37	245
2/3/2010 8:58	120	2/3/2010 13:08	361	2/3/2010 17:38	245
2/3/2010 8:59	120	2/3/2010 13:09	361	2/3/2010 17:39	245
2/3/2010 9:00	120	2/3/2010 13:10	361	2/3/2010 17:40	245
2/3/2010 9:01	120	2/3/2010 13:11	361	2/3/2010 17:41	245
2/3/2010 9:02	120	2/3/2010 13:12	361	2/3/2010 17:42	246
2/3/2010 9:03	120	2/3/2010 13:13	361	2/3/2010 17:43	246
2/3/2010 9:04	120	2/3/2010 13:14	361	2/3/2010 17:44	246
2/3/2010 9:05	120	2/3/2010 13:15	362	2/3/2010 17:45	246
2/3/2010 9:06	120	2/3/2010 13:16	362	2/3/2010 17:46	246
2/3/2010 9:07	120	2/3/2010 13:17	362	2/3/2010 17:47	246
2/3/2010 9:08	120	2/3/2010 13:18	362	2/3/2010 17:48	246
2/3/2010 9:09	120	2/3/2010 13:19	361	2/3/2010 17:49	246
2/3/2010 9:10	120	2/3/2010 13:20	361	2/3/2010 17:50	246
2/3/2010 9:11	121	2/3/2010 13:21	360	2/3/2010 17:51	247
2/3/2010 9:12	120	2/3/2010 13:22	360	2/3/2010 17:52	247
2/3/2010 9:13	120	2/3/2010 13:23	360	2/3/2010 17:53	247
2/3/2010 9:14	121	2/3/2010 13:24	360	2/3/2010 17:54	248
2/3/2010 9:15	120	2/3/2010 13:25	359	2/3/2010 17:55	248
2/3/2010 9:16	120	2/3/2010 13:26	360	2/3/2010 17:56	248
2/3/2010 9:17	120	2/3/2010 13:27	360	2/3/2010 17:57	248
2/3/2010 9:18	120	2/3/2010 13:28	361	2/3/2010 17:58	248
2/3/2010 9:19	120	2/3/2010 13:29	360	2/3/2010 17:59	248
2/3/2010 9:20	120	2/3/2010 13:30	361	2/3/2010 18:00	248
2/3/2010 9:21	120	2/3/2010 13:31	360	2/3/2010 18:01	249
2/3/2010 9:22	120	2/3/2010 13:32	361	2/3/2010 18:02	249
2/3/2010 9:23	120	2/3/2010 13:33	361	2/3/2010 18:03	249
2/3/2010 9:24	120	2/3/2010 13:34	360	2/3/2010 18:04	249
2/3/2010 9:25	120	2/3/2010 13:35	361	2/3/2010 18:05	248
2/3/2010 9:26	120	2/3/2010 13:36	361	2/3/2010 18:06	247
2/3/2010 9:27	120	2/3/2010 13:37	361	2/3/2010 18:07	247
2/3/2010 9:28	120	2/3/2010 13:38	361	2/3/2010 18:08	247
2/3/2010 9:29	120	2/3/2010 13:39	361	2/3/2010 18:09	247
2/3/2010 9:30	120	2/3/2010 13:40	361	2/3/2010 18:10	247
2/3/2010 9:31	120	2/3/2010 13:41	361	2/3/2010 18:11	248
2/3/2010 9:32	120	2/3/2010 13:42	361	2/3/2010 18:12	248
2/3/2010 9:33	120	2/3/2010 13:43	361	2/3/2010 18:13	248
2/3/2010 9:34	120	2/3/2010 13:44	361	2/3/2010 18:14	248
2/3/2010 9:35	120	2/3/2010 13:45	361	2/3/2010 18:15	248
2/3/2010 9:36	120	2/3/2010 13:46	360	2/3/2010 18:16	249
2/3/2010 9:37	121	2/3/2010 13:47	361	2/3/2010 18:17	248
2/3/2010 9:38	120	2/3/2010 13:48	361	2/3/2010 18:18	247
2/3/2010 9:39	121	2/3/2010 13:49	360	2/3/2010 18:19	247
2/3/2010 9:40	120	2/3/2010 13:50	360	2/3/2010 18:20	246
2/3/2010 9:41	120	2/3/2010 13:51	360	2/3/2010 18:21	246
2/3/2010 9:42	121	2/3/2010 13:52	360	2/3/2010 18:22	246
2/3/2010 9:43	121	2/3/2010 13:53	360	2/3/2010 18:23	247
2/3/2010 9:44	120	2/3/2010 13:54	361	2/3/2010 18:24	247
2/3/2010 9:45	120	2/3/2010 13:55	360	2/3/2010 18:25	246
Average	120	Average	361	Average	247

Run 10

Date/Time	MPP3 SO2#/MM Value
02/03/2010 08:45	0.583
02/03/2010 08:46	0.616
02/03/2010 08:47	0.651
02/03/2010 08:48	0.696
02/03/2010 08:49	0.734
02/03/2010 08:50	
02/03/2010 08:51	
02/03/2010 08:52	
02/03/2010 08:53	
02/03/2010 08:54	
02/03/2010 08:55	0.608
02/03/2010 08:56	0.584
02/03/2010 08:57	0.580
02/03/2010 08:58	0.600
02/03/2010 08:59	0.634
02/03/2010 09:00	0.669
02/03/2010 09:01	0.694
02/03/2010 09:02	0.725
02/03/2010 09:03	0.748
02/03/2010 09:04	0.753
02/03/2010 09:05	
02/03/2010 09:06	
02/03/2010 09:07	
02/03/2010 09:08	
02/03/2010 09:09	
02/03/2010 09:10	0.560
02/03/2010 09:11	0.573
02/03/2010 09:12	0.609
02/03/2010 09:13	0.651
02/03/2010 09:14	0.696
02/03/2010 09:15	0.726
02/03/2010 09:16	0.762
02/03/2010 09:17	0.776
02/03/2010 09:18	0.745
02/03/2010 09:19	0.727
02/03/2010 09:20	
02/03/2010 09:21	
02/03/2010 09:22	
02/03/2010 09:23	
02/03/2010 09:24	
02/03/2010 09:25	0.618
02/03/2010 09:26	0.652
02/03/2010 09:27	0.700
02/03/2010 09:28	0.732
02/03/2010 09:29	0.776
02/03/2010 09:30	0.798
02/03/2010 09:31	0.778
02/03/2010 09:32	0.722
02/03/2010 09:33	0.684
02/03/2010 09:34	0.598
02/03/2010 09:35	
02/03/2010 09:36	
02/03/2010 09:37	
02/03/2010 09:38	
02/03/2010 09:39	
02/03/2010 09:40	0.702
02/03/2010 09:41	0.736
02/03/2010 09:42	0.752
02/03/2010 09:43	0.783
02/03/2010 09:44	0.762
02/03/2010 09:45	0.736

Run 11

Date/Time	MPP3 SO2#/MM Value
02/03/2010 12:55	0.526
02/03/2010 12:56	0.561
02/03/2010 12:57	0.591
02/03/2010 12:58	0.618
02/03/2010 12:59	0.631
02/03/2010 13:00	0.612
02/03/2010 13:01	0.572
02/03/2010 13:02	0.524
02/03/2010 13:03	0.494
02/03/2010 13:04	0.476
02/03/2010 13:05	
02/03/2010 13:06	
02/03/2010 13:07	
02/03/2010 13:08	
02/03/2010 13:09	
02/03/2010 13:10	0.560
02/03/2010 13:11	0.584
02/03/2010 13:12	0.601
02/03/2010 13:13	0.584
02/03/2010 13:14	0.538
02/03/2010 13:15	0.488
02/03/2010 13:16	0.454
02/03/2010 13:17	0.438
02/03/2010 13:18	0.452
02/03/2010 13:19	0.479
02/03/2010 13:20	
02/03/2010 13:21	
02/03/2010 13:22	
02/03/2010 13:23	
02/03/2010 13:24	
02/03/2010 13:25	0.610
02/03/2010 13:26	0.614
02/03/2010 13:27	0.568
02/03/2010 13:28	0.508
02/03/2010 13:29	0.468
02/03/2010 13:30	0.473
02/03/2010 13:31	0.500
02/03/2010 13:32	0.528
02/03/2010 13:33	0.546
02/03/2010 13:34	0.569
02/03/2010 13:35	
02/03/2010 13:36	
02/03/2010 13:37	
02/03/2010 13:38	
02/03/2010 13:39	
02/03/2010 13:40	0.533
02/03/2010 13:41	0.499
02/03/2010 13:42	0.489
02/03/2010 13:43	0.505
02/03/2010 13:44	0.529
02/03/2010 13:45	0.562
02/03/2010 13:46	0.593
02/03/2010 13:47	0.626
02/03/2010 13:48	0.645
02/03/2010 13:49	0.643
02/03/2010 13:50	
02/03/2010 13:51	
02/03/2010 13:52	
02/03/2010 13:53	
02/03/2010 13:54	
02/03/2010 13:55	0.545

Run 12

Date/Time	MPP3 SO2#/MM Value
02/03/2010 17:25	0.744
02/03/2010 17:26	0.757
02/03/2010 17:27	0.727
02/03/2010 17:28	0.699
02/03/2010 17:29	0.669
02/03/2010 17:30	0.638
02/03/2010 17:31	0.609
02/03/2010 17:32	0.622
02/03/2010 17:33	0.652
02/03/2010 17:34	0.687
02/03/2010 17:35	
02/03/2010 17:36	
02/03/2010 17:37	
02/03/2010 17:38	
02/03/2010 17:39	
02/03/2010 17:40	0.702
02/03/2010 17:41	0.668
02/03/2010 17:42	0.642
02/03/2010 17:43	0.659
02/03/2010 17:44	0.667
02/03/2010 17:45	0.644
02/03/2010 17:46	0.644
02/03/2010 17:47	0.673
02/03/2010 17:48	0.704
02/03/2010 17:49	0.733
02/03/2010 17:50	
02/03/2010 17:51	
02/03/2010 17:52	
02/03/2010 17:53	
02/03/2010 17:54	
02/03/2010 17:55	0.612
02/03/2010 17:56	0.623
02/03/2010 17:57	0.658
02/03/2010 17:58	0.684
02/03/2010 17:59	0.710
02/03/2010 18:00	0.735
02/03/2010 18:01	0.725
02/03/2010 18:02	0.688
02/03/2010 18:03	0.659
02/03/2010 18:04	0.644
02/03/2010 18:05	
02/03/2010 18:06	
02/03/2010 18:07	
02/03/2010 18:08	
02/03/2010 18:09	
02/03/2010 18:10	0.716
02/03/2010 18:11	0.738
02/03/2010 18:12	0.718
02/03/2010 18:13	0.686
02/03/2010 18:14	0.649
02/03/2010 18:15	0.608
02/03/2010 18:16	0.586
02/03/2010 18:17	0.606
02/03/2010 18:18	0.647
02/03/2010 18:19	0.683
02/03/2010 18:20	
02/03/2010 18:21	
02/03/2010 18:22	
02/03/2010 18:23	
02/03/2010 18:24	
02/03/2010 18:25	0.614

Invalid data: either a daily calibration check or a blowback period
 Invalid data: calibration check or maintenance

Blowback Times: 5
 15 minutes: 20
 35 minutes BB: 35
 50: 50

Run 10

Coal Flow Coal Flow kpph
Total SUM 306.1031

Run 11

Coal Flow Coal Flow kpph
Total SUM 307.5582

Run 12

Coal Flow Coal Flow kpph
Total SUM 307.3282

Run 10	
Coal Flow 31	Coal Flow kpph

2/3/2010 8:45	74.6
2/3/2010 8:46	74.64
2/3/2010 8:47	74.69
2/3/2010 8:48	74.84
2/3/2010 8:49	75.06
2/3/2010 8:50	75.15
2/3/2010 8:51	75.25
2/3/2010 8:52	75.19
2/3/2010 8:53	75.12
2/3/2010 8:54	75.29
2/3/2010 8:55	75.06
2/3/2010 8:56	74.81
2/3/2010 8:57	75.13
2/3/2010 8:58	75.44
2/3/2010 8:59	75.54
2/3/2010 9:00	75.37
2/3/2010 9:01	75.42
2/3/2010 9:02	75.56
2/3/2010 9:03	75.52
2/3/2010 9:04	75.48
2/3/2010 9:05	75.43
2/3/2010 9:06	75.28
2/3/2010 9:07	75.13
2/3/2010 9:08	75.15
2/3/2010 9:09	75.16
2/3/2010 9:10	75.18
2/3/2010 9:11	74.9
2/3/2010 9:12	74.61
2/3/2010 9:13	74.78
2/3/2010 9:14	74.91
2/3/2010 9:15	75.01
2/3/2010 9:16	74.94
2/3/2010 9:17	74.79
2/3/2010 9:18	74.79
2/3/2010 9:19	74.79
2/3/2010 9:20	75.01
2/3/2010 9:21	75.06
2/3/2010 9:22	75.15
2/3/2010 9:23	75.26
2/3/2010 9:24	74.94
2/3/2010 9:25	75.08
2/3/2010 9:26	75.15
2/3/2010 9:27	75.13
2/3/2010 9:28	75.11
2/3/2010 9:29	75.09
2/3/2010 9:30	75.07
2/3/2010 9:31	74.94
2/3/2010 9:32	75
2/3/2010 9:33	75.24
2/3/2010 9:34	75.16
2/3/2010 9:35	74.95
2/3/2010 9:36	74.83
2/3/2010 9:37	74.83
2/3/2010 9:38	74.95
2/3/2010 9:39	75.13
2/3/2010 9:40	75.23
2/3/2010 9:41	75.17
2/3/2010 9:42	75.15
2/3/2010 9:43	75.42
2/3/2010 9:44	75.3
2/3/2010 9:45	74.92

Average 75.08656

Run 11	
Coal Flow 31	Coal Flow kpph

2/3/2010 12:55	75.29
2/3/2010 12:56	75.47
2/3/2010 12:57	75.39
2/3/2010 12:58	75.19
2/3/2010 12:59	75.36
2/3/2010 13:00	75.39
2/3/2010 13:01	75.41
2/3/2010 13:02	75.3
2/3/2010 13:03	75.26
2/3/2010 13:04	75.47
2/3/2010 13:05	75.59
2/3/2010 13:06	75.6
2/3/2010 13:07	75.6
2/3/2010 13:08	75.61
2/3/2010 13:09	75.49
2/3/2010 13:10	75.67
2/3/2010 13:11	75.87
2/3/2010 13:12	75.7
2/3/2010 13:13	75.7
2/3/2010 13:14	75.54
2/3/2010 13:15	75.53
2/3/2010 13:16	75.71
2/3/2010 13:17	75.39
2/3/2010 13:18	75.17
2/3/2010 13:19	75.46
2/3/2010 13:20	75.35
2/3/2010 13:21	75.3
2/3/2010 13:22	75.29
2/3/2010 13:23	74.81
2/3/2010 13:24	74.9
2/3/2010 13:25	74.99
2/3/2010 13:26	75.1
2/3/2010 13:27	75.5
2/3/2010 13:28	75.35
2/3/2010 13:29	75.33
2/3/2010 13:30	75.51
2/3/2010 13:31	75.35
2/3/2010 13:32	75.17
2/3/2010 13:33	75.3
2/3/2010 13:34	75.46
2/3/2010 13:35	75.33
2/3/2010 13:36	75.16
2/3/2010 13:37	75.46
2/3/2010 13:38	75.8
2/3/2010 13:39	75.62
2/3/2010 13:40	75.69
2/3/2010 13:41	76
2/3/2010 13:42	75.84
2/3/2010 13:43	75.67
2/3/2010 13:44	75.1
2/3/2010 13:45	74.8
2/3/2010 13:46	75.31
2/3/2010 13:47	75.59
2/3/2010 13:48	75.88
2/3/2010 13:49	75.73
2/3/2010 13:50	75.71
2/3/2010 13:51	75.79
2/3/2010 13:52	75.5
2/3/2010 13:53	75.53
2/3/2010 13:54	75.57
2/3/2010 13:55	75.45

Average 75.44918

Run 12	
Coal Flow 31	Coal Flow kpph

2/3/2010 17:25	72.03
2/3/2010 17:26	73.79
2/3/2010 17:27	74.6
2/3/2010 17:28	74.69
2/3/2010 17:29	74.5
2/3/2010 17:30	74.62
2/3/2010 17:31	74.91
2/3/2010 17:32	74.89
2/3/2010 17:33	75.04
2/3/2010 17:34	75.21
2/3/2010 17:35	75.35
2/3/2010 17:36	75.35
2/3/2010 17:37	75.2
2/3/2010 17:38	75.33
2/3/2010 17:39	75.61
2/3/2010 17:40	75.61
2/3/2010 17:41	75.75
2/3/2010 17:42	76.18
2/3/2010 17:43	76.44
2/3/2010 17:44	76.93
2/3/2010 17:45	77.09
2/3/2010 17:46	77.52
2/3/2010 17:47	77.94
2/3/2010 17:48	77.16
2/3/2010 17:49	76.52
2/3/2010 17:50	76.64
2/3/2010 17:51	76.6
2/3/2010 17:52	76.58
2/3/2010 17:53	76.53
2/3/2010 17:54	76.51
2/3/2010 17:55	76.55
2/3/2010 17:56	76.54
2/3/2010 17:57	76.15
2/3/2010 17:58	75.65
2/3/2010 17:59	75.95
2/3/2010 18:00	75.97
2/3/2010 18:01	75.71
2/3/2010 18:02	75.52
2/3/2010 18:03	75.71
2/3/2010 18:04	75.68
2/3/2010 18:05	75.65
2/3/2010 18:06	75.75
2/3/2010 18:07	75.4
2/3/2010 18:08	75.15
2/3/2010 18:09	75.35
2/3/2010 18:10	75.3
2/3/2010 18:11	74.99
2/3/2010 18:12	74.99
2/3/2010 18:13	75.02
2/3/2010 18:14	75.15
2/3/2010 18:15	75.31
2/3/2010 18:16	75.06
2/3/2010 18:17	74.81
2/3/2010 18:18	75
2/3/2010 18:19	75.06
2/3/2010 18:20	74.9
2/3/2010 18:21	75.01
2/3/2010 18:22	74.98
2/3/2010 18:23	74.7
2/3/2010 18:24	74.57
2/3/2010 18:25	74.72

Average 75.53148

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/3/2010 8:45	76.46	2/3/2010 12:55	77.24	2/3/2010 17:25	73.96
2/3/2010 8:46	76.55	2/3/2010 12:56	77.56	2/3/2010 17:26	75.52
2/3/2010 8:47	76.45	2/3/2010 12:57	77.46	2/3/2010 17:27	76.41
2/3/2010 8:48	76.62	2/3/2010 12:58	77.03	2/3/2010 17:28	76.43
2/3/2010 8:49	76.84	2/3/2010 12:59	77.04	2/3/2010 17:29	76.45
2/3/2010 8:50	77.09	2/3/2010 13:00	77.19	2/3/2010 17:30	76.46
2/3/2010 8:51	77.22	2/3/2010 13:01	77.17	2/3/2010 17:31	76.72
2/3/2010 8:52	77.42	2/3/2010 13:02	77.15	2/3/2010 17:32	77
2/3/2010 8:53	77.25	2/3/2010 13:03	77.38	2/3/2010 17:33	77.03
2/3/2010 8:54	77.02	2/3/2010 13:04	77.39	2/3/2010 17:34	77.05
2/3/2010 8:55	76.8	2/3/2010 13:05	77.05	2/3/2010 17:35	77.08
2/3/2010 8:56	76.72	2/3/2010 13:06	77.33	2/3/2010 17:36	77.1
2/3/2010 8:57	77.1	2/3/2010 13:07	77.66	2/3/2010 17:37	77.21
2/3/2010 8:58	77.26	2/3/2010 13:08	77.62	2/3/2010 17:38	77.2
2/3/2010 8:59	77.35	2/3/2010 13:09	77.36	2/3/2010 17:39	77.36
2/3/2010 9:00	77.48	2/3/2010 13:10	77.5	2/3/2010 17:40	77.45
2/3/2010 9:01	77.64	2/3/2010 13:11	77.92	2/3/2010 17:41	77.57
2/3/2010 9:02	77.6	2/3/2010 13:12	77.82	2/3/2010 17:42	78.01
2/3/2010 9:03	77.35	2/3/2010 13:13	77.72	2/3/2010 17:43	78
2/3/2010 9:04	77.22	2/3/2010 13:14	77.38	2/3/2010 17:44	78.11
2/3/2010 9:05	77.15	2/3/2010 13:15	77.19	2/3/2010 17:45	78.09
2/3/2010 9:06	77.32	2/3/2010 13:16	77.49	2/3/2010 17:46	77.85
2/3/2010 9:07	77.05	2/3/2010 13:17	77.34	2/3/2010 17:47	77.92
2/3/2010 9:08	77.18	2/3/2010 13:18	77.31	2/3/2010 17:48	77.98
2/3/2010 9:09	77.21	2/3/2010 13:19	77.72	2/3/2010 17:49	78.05
2/3/2010 9:10	76.97	2/3/2010 13:20	77.44	2/3/2010 17:50	78.12
2/3/2010 9:11	76.8	2/3/2010 13:21	77.1	2/3/2010 17:51	78.1
2/3/2010 9:12	76.45	2/3/2010 13:22	77.03	2/3/2010 17:52	77.99
2/3/2010 9:13	76.59	2/3/2010 13:23	76.8	2/3/2010 17:53	77.96
2/3/2010 9:14	76.62	2/3/2010 13:24	76.83	2/3/2010 17:54	78.01
2/3/2010 9:15	76.85	2/3/2010 13:25	76.93	2/3/2010 17:55	77.89
2/3/2010 9:16	76.99	2/3/2010 13:26	77.12	2/3/2010 17:56	77.93
2/3/2010 9:17	76.89	2/3/2010 13:27	77.26	2/3/2010 17:57	77.89
2/3/2010 9:18	76.97	2/3/2010 13:28	77.25	2/3/2010 17:58	77.68
2/3/2010 9:19	76.76	2/3/2010 13:29	77.26	2/3/2010 17:59	77.78
2/3/2010 9:20	76.81	2/3/2010 13:30	77.34	2/3/2010 18:00	77.88
2/3/2010 9:21	76.83	2/3/2010 13:31	77.32	2/3/2010 18:01	77.66
2/3/2010 9:22	76.98	2/3/2010 13:32	77.01	2/3/2010 18:02	77.47
2/3/2010 9:23	76.98	2/3/2010 13:33	77.2	2/3/2010 18:03	77.67
2/3/2010 9:24	76.85	2/3/2010 13:34	77.4	2/3/2010 18:04	77.56
2/3/2010 9:25	77.1	2/3/2010 13:35	77.24	2/3/2010 18:05	77.79
2/3/2010 9:26	76.93	2/3/2010 13:36	77.08	2/3/2010 18:06	77.88
2/3/2010 9:27	77.2	2/3/2010 13:37	77.48	2/3/2010 18:07	77.26
2/3/2010 9:28	77.25	2/3/2010 13:38	77.89	2/3/2010 18:08	76.98
2/3/2010 9:29	77.2	2/3/2010 13:39	77.94	2/3/2010 18:09	77.2
2/3/2010 9:30	77.11	2/3/2010 13:40	77.75	2/3/2010 18:10	77.27
2/3/2010 9:31	76.88	2/3/2010 13:41	77.78	2/3/2010 18:11	76.84
2/3/2010 9:32	76.84	2/3/2010 13:42	77.76	2/3/2010 18:12	76.86
2/3/2010 9:33	76.95	2/3/2010 13:43	77.63	2/3/2010 18:13	77.01
2/3/2010 9:34	77.13	2/3/2010 13:44	77.24	2/3/2010 18:14	77.05
2/3/2010 9:35	77.02	2/3/2010 13:45	76.91	2/3/2010 18:15	77.09
2/3/2010 9:36	76.76	2/3/2010 13:46	77.24	2/3/2010 18:16	77
2/3/2010 9:37	76.72	2/3/2010 13:47	77.57	2/3/2010 18:17	76.78
2/3/2010 9:38	77.1	2/3/2010 13:48	77.66	2/3/2010 18:18	76.72
2/3/2010 9:39	77.16	2/3/2010 13:49	77.71	2/3/2010 18:19	76.83
2/3/2010 9:40	77.03	2/3/2010 13:50	77.79	2/3/2010 18:20	76.78
2/3/2010 9:41	77.19	2/3/2010 13:51	77.59	2/3/2010 18:21	77.03
2/3/2010 9:42	77.05	2/3/2010 13:52	77.38	2/3/2010 18:22	77.21
2/3/2010 9:43	77.07	2/3/2010 13:53	77.33	2/3/2010 18:23	76.7
2/3/2010 9:44	77.12	2/3/2010 13:54	77.44	2/3/2010 18:24	76.54
2/3/2010 9:45	76.95	2/3/2010 13:55	77.35	2/3/2010 18:25	76.67

Average 77.00738

Average 77.3782

Average 77.26377

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/3/2010 8:45	76.61	2/3/2010 12:55	77.33	2/3/2010 17:25	74.04
2/3/2010 8:46	76.59	2/3/2010 12:56	77.41	2/3/2010 17:26	75.55
2/3/2010 8:47	76.58	2/3/2010 12:57	77.25	2/3/2010 17:27	76.35
2/3/2010 8:48	76.75	2/3/2010 12:58	77.06	2/3/2010 17:28	76.41
2/3/2010 8:49	77.15	2/3/2010 12:59	77.18	2/3/2010 17:29	76.35
2/3/2010 8:50	77.28	2/3/2010 13:00	77.3	2/3/2010 17:30	76.59
2/3/2010 8:51	77.32	2/3/2010 13:01	77.33	2/3/2010 17:31	76.83
2/3/2010 8:52	77.28	2/3/2010 13:02	77.26	2/3/2010 17:32	76.91
2/3/2010 8:53	77.1	2/3/2010 13:03	77.39	2/3/2010 17:33	76.9
2/3/2010 8:54	77.01	2/3/2010 13:04	77.34	2/3/2010 17:34	76.99
2/3/2010 8:55	76.76	2/3/2010 13:05	77.13	2/3/2010 17:35	77.24
2/3/2010 8:56	76.7	2/3/2010 13:06	77.27	2/3/2010 17:36	77.25
2/3/2010 8:57	76.87	2/3/2010 13:07	77.41	2/3/2010 17:37	77.08
2/3/2010 8:58	77.33	2/3/2010 13:08	77.47	2/3/2010 17:38	77.14
2/3/2010 8:59	77.49	2/3/2010 13:09	77.56	2/3/2010 17:39	77.35
2/3/2010 9:00	77.28	2/3/2010 13:10	77.62	2/3/2010 17:40	77.44
2/3/2010 9:01	77.34	2/3/2010 13:11	77.47	2/3/2010 17:41	77.66
2/3/2010 9:02	77.58	2/3/2010 13:12	77.57	2/3/2010 17:42	78.15
2/3/2010 9:03	77.62	2/3/2010 13:13	77.69	2/3/2010 17:43	78.27
2/3/2010 9:04	77.58	2/3/2010 13:14	77.53	2/3/2010 17:44	78.34
2/3/2010 9:05	77.58	2/3/2010 13:15	77.47	2/3/2010 17:45	78.25
2/3/2010 9:06	77.55	2/3/2010 13:16	77.51	2/3/2010 17:46	78.02
2/3/2010 9:07	77.27	2/3/2010 13:17	77.49	2/3/2010 17:47	78.1
2/3/2010 9:08	77	2/3/2010 13:18	77.4	2/3/2010 17:48	78.3
2/3/2010 9:09	77.02	2/3/2010 13:19	77.39	2/3/2010 17:49	78.41
2/3/2010 9:10	77.03	2/3/2010 13:20	77.22	2/3/2010 17:50	78.3
2/3/2010 9:11	76.73	2/3/2010 13:21	77.12	2/3/2010 17:51	78.08
2/3/2010 9:12	76.6	2/3/2010 13:22	77.22	2/3/2010 17:52	78.03
2/3/2010 9:13	76.48	2/3/2010 13:23	76.86	2/3/2010 17:53	78.11
2/3/2010 9:14	76.52	2/3/2010 13:24	76.74	2/3/2010 17:54	78.04
2/3/2010 9:15	76.94	2/3/2010 13:25	76.87	2/3/2010 17:55	77.98
2/3/2010 9:16	77.07	2/3/2010 13:26	77.05	2/3/2010 17:56	78.08
2/3/2010 9:17	76.88	2/3/2010 13:27	77.22	2/3/2010 17:57	77.96
2/3/2010 9:18	76.92	2/3/2010 13:28	77.01	2/3/2010 17:58	77.64
2/3/2010 9:19	76.81	2/3/2010 13:29	77.08	2/3/2010 17:59	77.71
2/3/2010 9:20	76.85	2/3/2010 13:30	77.45	2/3/2010 18:00	77.73
2/3/2010 9:21	76.79	2/3/2010 13:31	77.34	2/3/2010 18:01	77.49
2/3/2010 9:22	76.85	2/3/2010 13:32	77.16	2/3/2010 18:02	77.45
2/3/2010 9:23	76.91	2/3/2010 13:33	77.31	2/3/2010 18:03	77.62
2/3/2010 9:24	76.94	2/3/2010 13:34	77.23	2/3/2010 18:04	77.47
2/3/2010 9:25	77.27	2/3/2010 13:35	77.25	2/3/2010 18:05	77.5
2/3/2010 9:26	77	2/3/2010 13:36	77.13	2/3/2010 18:06	77.66
2/3/2010 9:27	76.86	2/3/2010 13:37	77.23	2/3/2010 18:07	77.39
2/3/2010 9:28	76.89	2/3/2010 13:38	77.67	2/3/2010 18:08	77.11
2/3/2010 9:29	76.92	2/3/2010 13:39	77.53	2/3/2010 18:09	77.17
2/3/2010 9:30	76.95	2/3/2010 13:40	77.52	2/3/2010 18:10	77.33
2/3/2010 9:31	76.74	2/3/2010 13:41	77.83	2/3/2010 18:11	77
2/3/2010 9:32	76.73	2/3/2010 13:42	77.68	2/3/2010 18:12	76.87
2/3/2010 9:33	76.95	2/3/2010 13:43	77.51	2/3/2010 18:13	76.92
2/3/2010 9:34	76.92	2/3/2010 13:44	77.2	2/3/2010 18:14	76.93
2/3/2010 9:35	76.96	2/3/2010 13:45	76.98	2/3/2010 18:15	77.05
2/3/2010 9:36	76.82	2/3/2010 13:46	77.32	2/3/2010 18:16	77.02
2/3/2010 9:37	76.81	2/3/2010 13:47	77.55	2/3/2010 18:17	76.81
2/3/2010 9:38	76.97	2/3/2010 13:48	77.8	2/3/2010 18:18	76.87
2/3/2010 9:39	76.97	2/3/2010 13:49	77.71	2/3/2010 18:19	77.11
2/3/2010 9:40	76.92	2/3/2010 13:50	77.75	2/3/2010 18:20	77.04
2/3/2010 9:41	77.06	2/3/2010 13:51	77.9	2/3/2010 18:21	77.04
2/3/2010 9:42	77.12	2/3/2010 13:52	77.59	2/3/2010 18:22	76.94
2/3/2010 9:43	77.24	2/3/2010 13:53	77.6	2/3/2010 18:23	76.44
2/3/2010 9:44	77.2	2/3/2010 13:54	77.6	2/3/2010 18:24	76.51
2/3/2010 9:45	76.94	2/3/2010 13:55	77.43	2/3/2010 18:25	76.64
Average	77.00328	Average	77.36869	Average	77.29443

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/3/2010 8:45	76.87	2/3/2010 12:55	77.21	2/3/2010 17:25	73.93
2/3/2010 8:46	76.95	2/3/2010 12:56	77.21	2/3/2010 17:26	75.46
2/3/2010 8:47	77.03	2/3/2010 12:57	77.21	2/3/2010 17:27	76.29
2/3/2010 8:48	77.11	2/3/2010 12:58	77.22	2/3/2010 17:28	76.39
2/3/2010 8:49	77.19	2/3/2010 12:59	77.22	2/3/2010 17:29	76.49
2/3/2010 8:50	77.27	2/3/2010 13:00	77.22	2/3/2010 17:30	76.58
2/3/2010 8:51	77.35	2/3/2010 13:01	77.22	2/3/2010 17:31	76.68
2/3/2010 8:52	77.37	2/3/2010 13:02	77.22	2/3/2010 17:32	76.77
2/3/2010 8:53	77.32	2/3/2010 13:03	77.22	2/3/2010 17:33	76.87
2/3/2010 8:54	77.28	2/3/2010 13:04	77.22	2/3/2010 17:34	76.97
2/3/2010 8:55	77.23	2/3/2010 13:05	77.22	2/3/2010 17:35	77.06
2/3/2010 8:56	77.18	2/3/2010 13:06	77.22	2/3/2010 17:36	77.16
2/3/2010 8:57	77.14	2/3/2010 13:07	77.22	2/3/2010 17:37	77.25
2/3/2010 8:58	77.13	2/3/2010 13:08	77.23	2/3/2010 17:38	77.35
2/3/2010 8:59	77.18	2/3/2010 13:09	77.23	2/3/2010 17:39	77.45
2/3/2010 9:00	77.22	2/3/2010 13:10	77.58	2/3/2010 17:40	77.54
2/3/2010 9:01	77.27	2/3/2010 13:11	77.69	2/3/2010 17:41	77.64
2/3/2010 9:02	77.31	2/3/2010 13:12	77.66	2/3/2010 17:42	77.73
2/3/2010 9:03	77.36	2/3/2010 13:13	77.8	2/3/2010 17:43	77.83
2/3/2010 9:04	77.35	2/3/2010 13:14	77.39	2/3/2010 17:44	77.93
2/3/2010 9:05	77.26	2/3/2010 13:15	77.23	2/3/2010 17:45	78.02
2/3/2010 9:06	77.18	2/3/2010 13:16	77.35	2/3/2010 17:46	78.12
2/3/2010 9:07	77.09	2/3/2010 13:17	77.46	2/3/2010 17:47	78.16
2/3/2010 9:08	77.01	2/3/2010 13:18	77.57	2/3/2010 17:48	78.14
2/3/2010 9:09	76.92	2/3/2010 13:19	77.68	2/3/2010 17:49	78.12
2/3/2010 9:10	76.84	2/3/2010 13:20	77.63	2/3/2010 17:50	78.09
2/3/2010 9:11	76.79	2/3/2010 13:21	77.38	2/3/2010 17:51	78.07
2/3/2010 9:12	76.8	2/3/2010 13:22	77.13	2/3/2010 17:52	78.05
2/3/2010 9:13	76.8	2/3/2010 13:23	76.89	2/3/2010 17:53	78.03
2/3/2010 9:14	76.8	2/3/2010 13:24	76.73	2/3/2010 17:54	78.01
2/3/2010 9:15	76.81	2/3/2010 13:25	76.68	2/3/2010 17:55	77.99
2/3/2010 9:16	76.81	2/3/2010 13:26	77.05	2/3/2010 17:56	77.97
2/3/2010 9:17	76.81	2/3/2010 13:27	77.47	2/3/2010 17:57	77.87
2/3/2010 9:18	76.82	2/3/2010 13:28	77.43	2/3/2010 17:58	77.7
2/3/2010 9:19	76.82	2/3/2010 13:29	77.39	2/3/2010 17:59	77.59
2/3/2010 9:20	76.83	2/3/2010 13:30	77.35	2/3/2010 18:00	77.54
2/3/2010 9:21	76.83	2/3/2010 13:31	77.31	2/3/2010 18:01	77.5
2/3/2010 9:22	76.83	2/3/2010 13:32	77.27	2/3/2010 18:02	77.46
2/3/2010 9:23	76.84	2/3/2010 13:33	77.23	2/3/2010 18:03	77.42
2/3/2010 9:24	76.84	2/3/2010 13:34	77.19	2/3/2010 18:04	77.38
2/3/2010 9:25	76.84	2/3/2010 13:35	77.15	2/3/2010 18:05	77.34
2/3/2010 9:26	76.85	2/3/2010 13:36	77.11	2/3/2010 18:06	77.3
2/3/2010 9:27	76.85	2/3/2010 13:37	77.26	2/3/2010 18:07	77.26
2/3/2010 9:28	76.85	2/3/2010 13:38	77.63	2/3/2010 18:08	77.22
2/3/2010 9:29	76.86	2/3/2010 13:39	77.8	2/3/2010 18:09	77.18
2/3/2010 9:30	76.86	2/3/2010 13:40	77.76	2/3/2010 18:10	77.14
2/3/2010 9:31	76.87	2/3/2010 13:41	77.72	2/3/2010 18:11	77.11
2/3/2010 9:32	76.87	2/3/2010 13:42	77.67	2/3/2010 18:12	77.07
2/3/2010 9:33	76.87	2/3/2010 13:43	77.63	2/3/2010 18:13	77.03
2/3/2010 9:34	76.88	2/3/2010 13:44	77.12	2/3/2010 18:14	77
2/3/2010 9:35	76.89	2/3/2010 13:45	76.71	2/3/2010 18:15	76.97
2/3/2010 9:36	76.91	2/3/2010 13:46	77.03	2/3/2010 18:16	76.94
2/3/2010 9:37	76.93	2/3/2010 13:47	77.34	2/3/2010 18:17	76.92
2/3/2010 9:38	76.95	2/3/2010 13:48	77.66	2/3/2010 18:18	76.89
2/3/2010 9:39	76.97	2/3/2010 13:49	77.8	2/3/2010 18:19	76.86
2/3/2010 9:40	76.99	2/3/2010 13:50	77.76	2/3/2010 18:20	76.83
2/3/2010 9:41	77.01	2/3/2010 13:51	77.71	2/3/2010 18:21	76.8
2/3/2010 9:42	77.03	2/3/2010 13:52	77.67	2/3/2010 18:22	76.78
2/3/2010 9:43	77.06	2/3/2010 13:53	77.62	2/3/2010 18:23	76.81
2/3/2010 9:44	77.08	2/3/2010 13:54	77.58	2/3/2010 18:24	76.82
2/3/2010 9:45	77.1	2/3/2010 13:55	77.53	2/3/2010 18:25	76.58
Average	77.0059	Average	77.36213	Average	77.23852

Total SUM 306.1031 Total SUM 307.5582 Total SUM 307.3282

Run 10	
Date/Time	MPP3 OPACITY Value

02/03/2010 08:42 6.99
 02/03/2010 08:48 6.94
 02/03/2010 08:54 6.90
 02/03/2010 09:00 7.27
 02/03/2010 09:06 7.10
 02/03/2010 09:12 7.07
 02/03/2010 09:18 6.79
 02/03/2010 09:24 7.06
 02/03/2010 09:30 6.86
 02/03/2010 09:36 7.03
 02/03/2010 09:42 7.17
 02/03/2010 09:48 6.95

Run 11	
Date/Time	MPP3 OPACITY Value

02/03/2010 12:54 5.88
 02/03/2010 13:00 5.99
 02/03/2010 13:06 6.00
 02/03/2010 13:12 5.40
 02/03/2010 13:18 6.11
 02/03/2010 13:24 5.75
 02/03/2010 13:30 5.53
 02/03/2010 13:36 5.61
 02/03/2010 13:42 5.85
 02/03/2010 13:48 5.41
 02/03/2010 13:54 5.51
 02/03/2010 14:00 5.77

Run 12	
Date/Time	MPP3 OPACITY Value

02/03/2010 17:24 5.43
 02/03/2010 17:30 5.44
 02/03/2010 17:36 5.56
 02/03/2010 17:42 5.42
 02/03/2010 17:48 5.54
 02/03/2010 17:54 5.82
 02/03/2010 18:00 5.63
 02/03/2010 18:06 5.26
 02/03/2010 18:12 5.39
 02/03/2010 18:18 5.57
 02/03/2010 18:24 5.50
 02/03/2010 18:30 5.34

6.95

February 8, 2010

Unit 3 Sorbent Injection - Common, APH, and ESP Feeder

Run 13		Run 14		Run 15		Run 16		Run 17	
Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr
2/8/2010 8:30	0	2/8/2010 10:20	0	2/8/2010 12:20	105	2/8/2010 15:30	316	2/8/2010 17:07	211
2/8/2010 8:31	0	2/8/2010 10:21	0	2/8/2010 12:21	105	2/8/2010 15:31	316	2/8/2010 17:08	211
2/8/2010 8:32	0	2/8/2010 10:22	0	2/8/2010 12:22	105	2/8/2010 15:32	317	2/8/2010 17:09	211
2/8/2010 8:33	0	2/8/2010 10:23	0	2/8/2010 12:23	105	2/8/2010 15:33	317	2/8/2010 17:10	211
2/8/2010 8:34	0	2/8/2010 10:24	0	2/8/2010 12:24	105	2/8/2010 15:34	317	2/8/2010 17:11	211
2/8/2010 8:35	0	2/8/2010 10:25	0	2/8/2010 12:25	105	2/8/2010 15:35	317	2/8/2010 17:12	211
2/8/2010 8:36	0	2/8/2010 10:26	0	2/8/2010 12:26	105	2/8/2010 15:36	317	2/8/2010 17:13	211
2/8/2010 8:37	0	2/8/2010 10:27	0	2/8/2010 12:27	105	2/8/2010 15:37	316	2/8/2010 17:14	211
2/8/2010 8:38	0	2/8/2010 10:28	0	2/8/2010 12:28	105	2/8/2010 15:38	317	2/8/2010 17:15	211
2/8/2010 8:39	0	2/8/2010 10:29	0	2/8/2010 12:29	105	2/8/2010 15:39	317	2/8/2010 17:16	211
2/8/2010 8:40	0	2/8/2010 10:30	0	2/8/2010 12:30	105	2/8/2010 15:40	317	2/8/2010 17:17	211
2/8/2010 8:41	0	2/8/2010 10:31	0	2/8/2010 12:31	105	2/8/2010 15:41	318	2/8/2010 17:18	211
2/8/2010 8:42	0	2/8/2010 10:32	0	2/8/2010 12:32	105	2/8/2010 15:42	318	2/8/2010 17:19	211
2/8/2010 8:43	0	2/8/2010 10:33	0	2/8/2010 12:33	105	2/8/2010 15:43	319	2/8/2010 17:20	211
2/8/2010 8:44	0	2/8/2010 10:34	0	2/8/2010 12:34	105	2/8/2010 15:44	320	2/8/2010 17:21	211
2/8/2010 8:45	0	2/8/2010 10:35	0	2/8/2010 12:35	105	2/8/2010 15:45	320	2/8/2010 17:22	211
2/8/2010 8:46	0	2/8/2010 10:36	0	2/8/2010 12:36	105	2/8/2010 15:46	316	2/8/2010 17:23	211
2/8/2010 8:47	0	2/8/2010 10:37	0	2/8/2010 12:37	105	2/8/2010 15:47	316	2/8/2010 17:24	211
2/8/2010 8:48	0	2/8/2010 10:38	0	2/8/2010 12:38	105	2/8/2010 15:48	317	2/8/2010 17:25	211
2/8/2010 8:49	0	2/8/2010 10:39	0	2/8/2010 12:39	105	2/8/2010 15:49	316	2/8/2010 17:26	211
2/8/2010 8:50	0	2/8/2010 10:40	0	2/8/2010 12:40	105	2/8/2010 15:50	315	2/8/2010 17:27	211
2/8/2010 8:51	0	2/8/2010 10:41	0	2/8/2010 12:41	105	2/8/2010 15:51	316	2/8/2010 17:28	211
2/8/2010 8:52	0	2/8/2010 10:42	0	2/8/2010 12:42	105	2/8/2010 15:52	316	2/8/2010 17:29	211
2/8/2010 8:53	0	2/8/2010 10:43	0	2/8/2010 12:43	105	2/8/2010 15:53	316	2/8/2010 17:30	211
2/8/2010 8:54	0	2/8/2010 10:44	0	2/8/2010 12:44	105	2/8/2010 15:54	315	2/8/2010 17:31	211
2/8/2010 8:55	0	2/8/2010 10:45	0	2/8/2010 12:45	105	2/8/2010 15:55	316	2/8/2010 17:32	211
2/8/2010 8:56	0	2/8/2010 10:46	0	2/8/2010 12:46	105	2/8/2010 15:56	316	2/8/2010 17:33	211
2/8/2010 8:57	0	2/8/2010 10:47	0	2/8/2010 12:47	105	2/8/2010 15:57	315	2/8/2010 17:34	211
2/8/2010 8:58	0	2/8/2010 10:48	0	2/8/2010 12:48	105	2/8/2010 15:58	317	2/8/2010 17:35	211
2/8/2010 8:59	0	2/8/2010 10:49	0	2/8/2010 12:49	105	2/8/2010 15:59	316	2/8/2010 17:36	211
2/8/2010 9:00	0	2/8/2010 10:50	0	2/8/2010 12:50	105	2/8/2010 16:00	316	2/8/2010 17:37	211
2/8/2010 9:01	0	2/8/2010 10:51	0	2/8/2010 12:51	105	2/8/2010 16:01	316	2/8/2010 17:38	211
2/8/2010 9:02	0	2/8/2010 10:52	0	2/8/2010 12:52	105	2/8/2010 16:02	316	2/8/2010 17:39	211
2/8/2010 9:03	0	2/8/2010 10:53	0	2/8/2010 12:53	105	2/8/2010 16:03	315	2/8/2010 17:40	211
2/8/2010 9:04	0	2/8/2010 10:54	0	2/8/2010 12:54	105	2/8/2010 16:04	316	2/8/2010 17:41	211
2/8/2010 9:05	0	2/8/2010 10:55	0	2/8/2010 12:55	105	2/8/2010 16:05	316	2/8/2010 17:42	211
2/8/2010 9:06	0	2/8/2010 10:56	0	2/8/2010 12:56	105	2/8/2010 16:06	316	2/8/2010 17:43	211
2/8/2010 9:07	0	2/8/2010 10:57	0	2/8/2010 12:57	105	2/8/2010 16:07	317	2/8/2010 17:44	211
2/8/2010 9:08	0	2/8/2010 10:58	0	2/8/2010 12:58	105	2/8/2010 16:08	316	2/8/2010 17:45	211
2/8/2010 9:09	0	2/8/2010 10:59	0	2/8/2010 12:59	105	2/8/2010 16:09	315	2/8/2010 17:46	211
2/8/2010 9:10	0	2/8/2010 11:00	0	2/8/2010 13:00	105	2/8/2010 16:10	316	2/8/2010 17:47	211
2/8/2010 9:11	0	2/8/2010 11:01	0	2/8/2010 13:01	105	2/8/2010 16:11	317	2/8/2010 17:48	211
2/8/2010 9:12	0	2/8/2010 11:02	0	2/8/2010 13:02	105	2/8/2010 16:12	316	2/8/2010 17:49	211
2/8/2010 9:13	0	2/8/2010 11:03	0	2/8/2010 13:03	105	2/8/2010 16:13	316	2/8/2010 17:50	211
2/8/2010 9:14	0	2/8/2010 11:04	0	2/8/2010 13:04	105	2/8/2010 16:14	316	2/8/2010 17:51	211
2/8/2010 9:15	0	2/8/2010 11:05	0	2/8/2010 13:05	105	2/8/2010 16:15	316	2/8/2010 17:52	211
2/8/2010 9:16	0	2/8/2010 11:06	0	2/8/2010 13:06	105	2/8/2010 16:16	316	2/8/2010 17:53	211
2/8/2010 9:17	0	2/8/2010 11:07	0	2/8/2010 13:07	105	2/8/2010 16:17	316	2/8/2010 17:54	211
2/8/2010 9:18	0	2/8/2010 11:08	0	2/8/2010 13:08	105	2/8/2010 16:18	316	2/8/2010 17:55	211
2/8/2010 9:19	0	2/8/2010 11:09	0	2/8/2010 13:09	105	2/8/2010 16:19	316	2/8/2010 17:56	211
2/8/2010 9:20	0	2/8/2010 11:10	0	2/8/2010 13:10	105	2/8/2010 16:20	316	2/8/2010 17:57	211
2/8/2010 9:21	0	2/8/2010 11:11	0	2/8/2010 13:11	105	2/8/2010 16:21	316	2/8/2010 17:58	211
2/8/2010 9:22	0	2/8/2010 11:12	0	2/8/2010 13:12	105	2/8/2010 16:22	316	2/8/2010 17:59	211
2/8/2010 9:23	0	2/8/2010 11:13	0	2/8/2010 13:13	105	2/8/2010 16:23	317	2/8/2010 18:00	211
2/8/2010 9:24	0	2/8/2010 11:14	0	2/8/2010 13:14	105	2/8/2010 16:24	316	2/8/2010 18:01	211
2/8/2010 9:25	0	2/8/2010 11:15	0	2/8/2010 13:15	105	2/8/2010 16:25	315	2/8/2010 18:02	211
2/8/2010 9:26	0	2/8/2010 11:16	0	2/8/2010 13:16	105	2/8/2010 16:26	316	2/8/2010 18:03	211
2/8/2010 9:27	0	2/8/2010 11:17	0	2/8/2010 13:17	105	2/8/2010 16:27	316	2/8/2010 18:04	211
2/8/2010 9:28	0	2/8/2010 11:18	0	2/8/2010 13:18	105	2/8/2010 16:28	316	2/8/2010 18:05	211
2/8/2010 9:29	0	2/8/2010 11:19	0	2/8/2010 13:19	105	2/8/2010 16:29	316	2/8/2010 18:06	211
2/8/2010 9:30	0	2/8/2010 11:20	0	2/8/2010 13:20	105	2/8/2010 16:30	316	2/8/2010 18:07	211
Average	0	Average	0	Average	105	Average	316	Average	211

Run 13	
Date/Time	MPP3 SO2#/MM Value
02/08/2010 08:30	0.000
02/08/2010 08:31	0.318
02/08/2010 08:32	0.335
02/08/2010 08:33	0.348
02/08/2010 08:34	0.364
02/08/2010 08:35	
02/08/2010 08:36	
02/08/2010 08:37	
02/08/2010 08:38	
02/08/2010 08:39	
02/08/2010 08:40	0.269
02/08/2010 08:41	0.266
02/08/2010 08:42	0.299
02/08/2010 08:43	0.315
02/08/2010 08:44	0.330
02/08/2010 08:45	0.339
02/08/2010 08:46	0.347
02/08/2010 08:47	0.361
02/08/2010 08:48	0.339
02/08/2010 08:49	0.282
02/08/2010 08:50	
02/08/2010 08:51	
02/08/2010 08:52	
02/08/2010 08:53	
02/08/2010 08:54	
02/08/2010 08:55	0.281
02/08/2010 08:56	0.292
02/08/2010 08:57	0.304
02/08/2010 08:58	0.315
02/08/2010 08:59	0.329
02/08/2010 09:00	0.332
02/08/2010 09:01	0.332
02/08/2010 09:02	0.302
02/08/2010 09:03	0.274
02/08/2010 09:04	0.269
02/08/2010 09:05	
02/08/2010 09:06	
02/08/2010 09:07	
02/08/2010 09:08	
02/08/2010 09:09	
02/08/2010 09:10	0.312
02/08/2010 09:11	0.325
02/08/2010 09:12	0.334
02/08/2010 09:13	0.335
02/08/2010 09:14	0.325
02/08/2010 09:15	0.295
02/08/2010 09:16	0.277
02/08/2010 09:17	0.272
02/08/2010 09:18	0.269
02/08/2010 09:19	0.272
02/08/2010 09:20	
02/08/2010 09:21	
02/08/2010 09:22	
02/08/2010 09:23	
02/08/2010 09:24	
02/08/2010 09:25	0.321
02/08/2010 09:26	0.333
02/08/2010 09:27	0.339
02/08/2010 09:28	0.344
02/08/2010 09:29	0.321
02/08/2010 09:30	0.291

Run 14	
Date/Time	MPP3 SO2#/MM Value
02/08/2010 10:20	
02/08/2010 10:21	
02/08/2010 10:22	
02/08/2010 10:23	
02/08/2010 10:24	
02/08/2010 10:25	0.345
02/08/2010 10:26	0.360
02/08/2010 10:27	0.342
02/08/2010 10:28	0.312
02/08/2010 10:29	0.295
02/08/2010 10:30	0.285
02/08/2010 10:31	0.278
02/08/2010 10:32	0.287
02/08/2010 10:33	0.300
02/08/2010 10:34	0.308
02/08/2010 10:35	
02/08/2010 10:36	
02/08/2010 10:37	
02/08/2010 10:38	
02/08/2010 10:39	
02/08/2010 10:40	0.360
02/08/2010 10:41	0.336
02/08/2010 10:42	0.308
02/08/2010 10:43	0.297
02/08/2010 10:44	0.294
02/08/2010 10:45	0.294
02/08/2010 10:46	0.305
02/08/2010 10:47	0.323
02/08/2010 10:48	0.330
02/08/2010 10:49	0.335
02/08/2010 10:50	
02/08/2010 10:51	
02/08/2010 10:52	
02/08/2010 10:53	
02/08/2010 10:54	
02/08/2010 10:55	0.334
02/08/2010 10:56	0.311
02/08/2010 10:57	0.302
02/08/2010 10:58	0.307
02/08/2010 10:59	0.313
02/08/2010 11:00	0.315
02/08/2010 11:01	0.312
02/08/2010 11:02	0.311
02/08/2010 11:03	0.321
02/08/2010 11:04	0.333
02/08/2010 11:05	
02/08/2010 11:06	
02/08/2010 11:07	
02/08/2010 11:08	
02/08/2010 11:09	
02/08/2010 11:10	0.313
02/08/2010 11:11	0.303
02/08/2010 11:12	0.297
02/08/2010 11:13	0.305
02/08/2010 11:14	0.313
02/08/2010 11:15	0.319
02/08/2010 11:16	0.330
02/08/2010 11:17	0.338
02/08/2010 11:18	0.347
02/08/2010 11:19	0.354
02/08/2010 11:20	

Run 15	
Date/Time	MPP3 SO2#/MM Value
02/08/2010 12:20	
02/08/2010 12:21	
02/08/2010 12:22	
02/08/2010 12:23	
02/08/2010 12:24	
02/08/2010 12:25	0.322
02/08/2010 12:26	0.336
02/08/2010 12:27	0.345
02/08/2010 12:28	0.346
02/08/2010 12:29	0.349
02/08/2010 12:30	0.358
02/08/2010 12:31	0.370
02/08/2010 12:32	0.374
02/08/2010 12:33	0.353
02/08/2010 12:34	0.326
02/08/2010 12:35	
02/08/2010 12:36	
02/08/2010 12:37	
02/08/2010 12:38	
02/08/2010 12:39	
02/08/2010 12:40	0.331
02/08/2010 12:41	0.343
02/08/2010 12:42	0.356
02/08/2010 12:43	0.359
02/08/2010 12:44	0.364
02/08/2010 12:45	0.358
02/08/2010 12:46	0.354
02/08/2010 12:47	0.326
02/08/2010 12:48	0.306
02/08/2010 12:49	0.300
02/08/2010 12:50	
02/08/2010 12:51	
02/08/2010 12:52	
02/08/2010 12:53	
02/08/2010 12:54	
02/08/2010 12:55	0.327
02/08/2010 12:56	0.342
02/08/2010 12:57	0.358
02/08/2010 12:58	0.376
02/08/2010 12:59	0.382
02/08/2010 13:00	0.373
02/08/2010 13:01	0.344
02/08/2010 13:02	0.318
02/08/2010 13:03	0.302
02/08/2010 13:04	0.299
02/08/2010 13:05	
02/08/2010 13:06	
02/08/2010 13:07	
02/08/2010 13:08	
02/08/2010 13:09	
02/08/2010 13:10	0.328
02/08/2010 13:11	0.345
02/08/2010 13:12	0.362
02/08/2010 13:13	0.369
02/08/2010 13:14	0.370
02/08/2010 13:15	
02/08/2010 13:16	
02/08/2010 13:17	
02/08/2010 13:18	
02/08/2010 13:19	
02/08/2010 13:20	

Run 16	
Date/Time	MPP3 SO2#/MM Value
02/08/2010 15:30	0.365
02/08/2010 15:31	0.341
02/08/2010 15:32	0.312
02/08/2010 15:33	0.294
02/08/2010 15:34	0.289
02/08/2010 15:35	
02/08/2010 15:36	
02/08/2010 15:37	
02/08/2010 15:38	
02/08/2010 15:39	
02/08/2010 15:40	0.312
02/08/2010 15:41	0.328
02/08/2010 15:42	0.339
02/08/2010 15:43	0.357
02/08/2010 15:44	0.359
02/08/2010 15:45	0.358
02/08/2010 15:46	0.347
02/08/2010 15:47	0.327
02/08/2010 15:48	0.320
02/08/2010 15:49	0.318
02/08/2010 15:50	
02/08/2010 15:51	
02/08/2010 15:52	
02/08/2010 15:53	
02/08/2010 15:54	
02/08/2010 15:55	0.285
02/08/2010 15:56	0.297
02/08/2010 15:57	0.312
02/08/2010 15:58	0.328
02/08/2010 15:59	0.331
02/08/2010 16:00	0.323
02/08/2010 16:01	0.321
02/08/2010 16:02	0.328
02/08/2010 16:03	0.338
02/08/2010 16:04	0.341
02/08/2010 16:05	
02/08/2010 16:06	
02/08/2010 16:07	
02/08/2010 16:08	
02/08/2010 16:09	
02/08/2010 16:10	0.296
02/08/2010 16:11	0.302
02/08/2010 16:12	0.315
02/08/2010 16:13	0.327
02/08/2010 16:14	0.332
02/08/2010 16:15	0.337
02/08/2010 16:16	0.354
02/08/2010 16:17	0.360
02/08/2010 16:18	0.349
02/08/2010 16:19	0.335
02/08/2010 16:20	
02/08/2010 16:21	
02/08/2010 16:22	
02/08/2010 16:23	
02/08/2010 16:24	
02/08/2010 16:25	0.308
02/08/2010 16:26	0.307
02/08/2010 16:27	0.305
02/08/2010 16:28	0.311
02/08/2010 16:29	0.323
02/08/2010 16:30	0.340

Run 17	
Date/Time	MPP3 SO2#/MM Value
02/08/2010 17:07	
02/08/2010 17:08	
02/08/2010 17:09	
02/08/2010 17:10	0.317
02/08/2010 17:11	0.334
02/08/2010 17:12	0.359
02/08/2010 17:13	0.369
02/08/2010 17:14	0.366
02/08/2010 17:15	0.357
02/08/2010 17:16	0.330
02/08/2010 17:17	0.308
02/08/2010 17:18	0.296
02/08/2010 17:19	0.296
02/08/2010 17:20	
02/08/2010 17:21	
02/08/2010 17:22	
02/08/2010 17:23	
02/08/2010 17:24	
02/08/2010 17:25	0.320
02/08/2010 17:26	0.338
02/08/2010 17:27	0.348
02/08/2010 17:28	0.359
02/08/2010 17:29	0.367
02/08/2010 17:30	0.355
02/08/2010 17:31	0.330
02/08/2010 17:32	0.313
02/08/2010 17:33	0.309
02/08/2010 17:34	0.312
02/08/2010 17:35	
02/08/2010 17:36	
02/08/2010 17:37	
02/08/2010 17:38	
02/08/2010 17:39	
02/08/2010 17:40	0.326
02/08/2010 17:41	0.353
02/08/2010 17:42	0.362
02/08/2010 17:43	0.374
02/08/2010 17:44	0.382
02/08/2010 17:45	0.358
02/08/2010 17:46	0.323
02/08/2010 17:47	0.308
02/08/2010 17:48	0.305
02/08/2010 17:49	0.321
02/08/2010 17:50	
02/08/2010 17:51	
02/08/2010 17:52	
02/08/2010 17:53	
02/08/2010 17:54	
02/08/2010 17:55	0.340
02/08/2010 17:56	0.351
02/08/2010 17:57	0.363
02/08/2010 17:58	0.377
02/08/2010 17:59	0.370
02/08/2010 18:00	0.361
02/08/2010 18:01	0.342
02/08/2010 18:02	0.319
02/08/2010 18:03	0.312
02/08/2010 18:04	0.324
02/08/2010 18:05	
02/08/2010 18:06	
02/08/2010 18:07	

Invalid data: either a daily calibration check or a blowback period
 Invalid data: calibration check or maintenance

Blowback Times: 5
 15 minutes 20
 35
 5 minutes BB 50

Run 13

Coal Flow Coal Flow kpph
Total SUM 250.7954

Run 14

Coal Flow Coal Flow kpph
Total SUM 246.888

Run 15

Coal Flow Coal Flow kpph
Total SUM 250.4597

Run 16

Coal Flow Coal Flow kpph
Total SUM 250.2966

Run 17

Coal Flow Coal Flow kpph
Total SUM 250.5313

Run 13	
Coal Flow 31	Coal Flow kpph

2/8/2010 8:30	59.01
2/8/2010 8:31	58.99
2/8/2010 8:32	58.97
2/8/2010 8:33	58.96
2/8/2010 8:34	59.26
2/8/2010 8:35	59.28
2/8/2010 8:36	58.95
2/8/2010 8:37	58.99
2/8/2010 8:38	58.72
2/8/2010 8:39	58.72
2/8/2010 8:40	58.73
2/8/2010 8:41	58.73
2/8/2010 8:42	58.74
2/8/2010 8:43	58.75
2/8/2010 8:44	58.75
2/8/2010 8:45	58.42
2/8/2010 8:46	58.38
2/8/2010 8:47	58.35
2/8/2010 8:48	58.58
2/8/2010 8:49	58.83
2/8/2010 8:50	58.84
2/8/2010 8:51	58.55
2/8/2010 8:52	58.72
2/8/2010 8:53	58.9
2/8/2010 8:54	59.09
2/8/2010 8:55	58.54
2/8/2010 8:56	58.81
2/8/2010 8:57	58.46
2/8/2010 8:58	58.84
2/8/2010 8:59	58.86
2/8/2010 9:00	59.14
2/8/2010 9:01	58.87
2/8/2010 9:02	59.12
2/8/2010 9:03	59.1
2/8/2010 9:04	59.06
2/8/2010 9:05	59.03
2/8/2010 9:06	58.99
2/8/2010 9:07	59.27
2/8/2010 9:08	59.28
2/8/2010 9:09	58.98
2/8/2010 9:10	58.96
2/8/2010 9:11	58.96
2/8/2010 9:12	59.44
2/8/2010 9:13	59.46
2/8/2010 9:14	59.72
2/8/2010 9:15	59.42
2/8/2010 9:16	59.1
2/8/2010 9:17	59.39
2/8/2010 9:18	59.42
2/8/2010 9:19	59.04
2/8/2010 9:20	59.17
2/8/2010 9:21	59.33
2/8/2010 9:22	59.33
2/8/2010 9:23	59.33
2/8/2010 9:24	59.34
2/8/2010 9:25	59.19
2/8/2010 9:26	59.04
2/8/2010 9:27	59.03
2/8/2010 9:28	59.03
2/8/2010 9:29	59.03
2/8/2010 9:30	58.79

Average 58.98492

Run 14	
Coal Flow 31	Coal Flow kpph

2/8/2010 10:20	59.57
2/8/2010 10:21	59.56
2/8/2010 10:22	60.08
2/8/2010 10:23	59.87
2/8/2010 10:24	59.63
2/8/2010 10:25	59.39
2/8/2010 10:26	59.33
2/8/2010 10:27	2.32
2/8/2010 10:28	57.53
2/8/2010 10:29	59.36
2/8/2010 10:30	59.58
2/8/2010 10:31	59.83
2/8/2010 10:32	59.48
2/8/2010 10:33	59.11
2/8/2010 10:34	59.12
2/8/2010 10:35	60.08
2/8/2010 10:36	59.86
2/8/2010 10:37	59.26
2/8/2010 10:38	58.33
2/8/2010 10:39	58.64
2/8/2010 10:40	58.6
2/8/2010 10:41	58.87
2/8/2010 10:42	59.7
2/8/2010 10:43	59.47
2/8/2010 10:44	58.71
2/8/2010 10:45	59.15
2/8/2010 10:46	59.11
2/8/2010 10:47	59.05
2/8/2010 10:48	58.98
2/8/2010 10:49	59.28
2/8/2010 10:50	57.98
2/8/2010 10:51	57.82
2/8/2010 10:52	57.71
2/8/2010 10:53	58.3
2/8/2010 10:54	58.3
2/8/2010 10:55	58.28
2/8/2010 10:56	58.26
2/8/2010 10:57	58.23
2/8/2010 10:58	58.21
2/8/2010 10:59	58.61
2/8/2010 11:00	58.63
2/8/2010 11:01	58.64
2/8/2010 11:02	58.64
2/8/2010 11:03	58.65
2/8/2010 11:04	58.66
2/8/2010 11:05	58.67
2/8/2010 11:06	59.18
2/8/2010 11:07	59.26
2/8/2010 11:08	58.65
2/8/2010 11:09	58.9
2/8/2010 11:10	59.18
2/8/2010 11:11	59.46
2/8/2010 11:12	59.22
2/8/2010 11:13	59.18
2/8/2010 11:14	59.14
2/8/2010 11:15	59.11
2/8/2010 11:16	59.53
2/8/2010 11:17	59.54
2/8/2010 11:18	59.28
2/8/2010 11:19	59.31
2/8/2010 11:20	59.6

Average 58.08164

Run 15	
Coal Flow 31	Coal Flow kpph

2/8/2010 12:20	58.71
2/8/2010 12:21	59.05
2/8/2010 12:22	59.23
2/8/2010 12:23	59.41
2/8/2010 12:24	59.35
2/8/2010 12:25	59.28
2/8/2010 12:26	58.96
2/8/2010 12:27	59.42
2/8/2010 12:28	59.43
2/8/2010 12:29	59.43
2/8/2010 12:30	59.07
2/8/2010 12:31	58.69
2/8/2010 12:32	58.78
2/8/2010 12:33	58.89
2/8/2010 12:34	59.21
2/8/2010 12:35	59.53
2/8/2010 12:36	58.89
2/8/2010 12:37	58.87
2/8/2010 12:38	59.31
2/8/2010 12:39	59.01
2/8/2010 12:40	59.38
2/8/2010 12:41	59.14
2/8/2010 12:42	59.15
2/8/2010 12:43	59.17
2/8/2010 12:44	58.85
2/8/2010 12:45	58.84
2/8/2010 12:46	58.47
2/8/2010 12:47	58.74
2/8/2010 12:48	59.03
2/8/2010 12:49	58.88
2/8/2010 12:50	58.71
2/8/2010 12:51	58.71
2/8/2010 12:52	58.97
2/8/2010 12:53	58.72
2/8/2010 12:54	58.97
2/8/2010 12:55	58.9
2/8/2010 12:56	58.83
2/8/2010 12:57	58.75
2/8/2010 12:58	59.01
2/8/2010 12:59	58.66
2/8/2010 13:00	58.65
2/8/2010 13:01	58.65
2/8/2010 13:02	58.65
2/8/2010 13:03	58.65
2/8/2010 13:04	58.64
2/8/2010 13:05	58.95
2/8/2010 13:06	58.9
2/8/2010 13:07	58.57
2/8/2010 13:08	58.67
2/8/2010 13:09	58.78
2/8/2010 13:10	58.89
2/8/2010 13:11	59
2/8/2010 13:12	58.46
2/8/2010 13:13	58.84
2/8/2010 13:14	58.77
2/8/2010 13:15	58.25
2/8/2010 13:16	58.59
2/8/2010 13:17	58.68
2/8/2010 13:18	58.76
2/8/2010 13:19	58.84
2/8/2010 13:20	58.61

Average 58.90492

Run 16	
Coal Flow 31	Coal Flow kpph

2/8/2010 15:30	59.19
2/8/2010 15:31	59.18
2/8/2010 15:32	58.51
2/8/2010 15:33	58.3
2/8/2010 15:34	58.57
2/8/2010 15:35	58.84
2/8/2010 15:36	59.11
2/8/2010 15:37	59.01
2/8/2010 15:38	58.9
2/8/2010 15:39	58.63
2/8/2010 15:40	58.67
2/8/2010 15:41	58.72
2/8/2010 15:42	58.76
2/8/2010 15:43	58.41
2/8/2010 15:44	58.51
2/8/2010 15:45	58.62
2/8/2010 15:46	58.93
2/8/2010 15:47	58.93
2/8/2010 15:48	59.18
2/8/2010 15:49	59.19
2/8/2010 15:50	58.83
2/8/2010 15:51	58.46
2/8/2010 15:52	58.54
2/8/2010 15:53	58.63
2/8/2010 15:54	58.72
2/8/2010 15:55	59.01
2/8/2010 15:56	59.31
2/8/2010 15:57	58.62
2/8/2010 15:58	58.22
2/8/2010 15:59	58.76
2/8/2010 16:00	59.02
2/8/2010 16:01	59.28
2/8/2010 16:02	59.25
2/8/2010 16:03	59.21
2/8/2010 16:04	59.09
2/8/2010 16:05	58.96
2/8/2010 16:06	59.18
2/8/2010 16:07	58.93
2/8/2010 16:08	59.08
2/8/2010 16:09	59.23
2/8/2010 16:10	59.24
2/8/2010 16:11	58.5
2/8/2010 16:12	59.12
2/8/2010 16:13	59.33
2/8/2010 16:14	59.25
2/8/2010 16:15	58.67
2/8/2010 16:16	58.94
2/8/2010 16:17	59.02
2/8/2010 16:18	59.11
2/8/2010 16:19	59.19
2/8/2010 16:20	58.88
2/8/2010 16:21	58.9
2/8/2010 16:22	58.93
2/8/2010 16:23	59.53
2/8/2010 16:24	58.75
2/8/2010 16:25	57.95
2/8/2010 16:26	58.93
2/8/2010 16:27	58.74
2/8/2010 16:28	59.27
2/8/2010 16:29	59.27
2/8/2010 16:30	58.33

Average 58.89082

Run 17	
Coal Flow 31	Coal Flow kpph

2/8/2010 17:07	58.42
2/8/2010 17:08	58.79
2/8/2010 17:09	58.75
2/8/2010 17:10	58.29
2/8/2010 17:11	58.51
2/8/2010 17:12	58.98
2/8/2010 17:13	59.44
2/8/2010 17:14	59.09
2/8/2010 17:15	58.74
2/8/2010 17:16	57.74
2/8/2010 17:17	59.05
2/8/2010 17:18	59.43
2/8/2010 17:19	59.45
2/8/2010 17:20	59.16
2/8/2010 17:21	59.16
2/8/2010 17:22	59.63
2/8/2010 17:23	59.33
2/8/2010 17:24	59.03
2/8/2010 17:25	58.94
2/8/2010 17:26	59.22
2/8/2010 17:27	59.81
2/8/2010 17:28	59.39
2/8/2010 17:29	58.96
2/8/2010 17:30	59.11
2/8/2010 17:31	58.91
2/8/2010 17:32	59.17
2/8/2010 17:33	58.85
2/8/2010 17:34	59.23
2/8/2010 17:35	59.28
2/8/2010 17:36	59.02
2/8/2010 17:37	58.36
2/8/2010 17:38	58.89
2/8/2010 17:39	58.45
2/8/2010 17:40	59.19
2/8/2010 17:41	58.91
2/8/2010 17:42	58.94
2/8/2010 17:43	58.98
2/8/2010 17:44	58.16
2/8/2010 17:45	58.89
2/8/2010 17:46	59.29
2/8/2010 17:47	58.46
2/8/2010 17:48	58.91
2/8/2010 17:49	58.91
2/8/2010 17:50	59.2
2/8/2010 17:51	58.96
2/8/2010 17:52	58.71
2/8/2010 17:53	57.87
2/8/2010 17:54	58.46
2/8/2010 17:55	59.44
2/8/2010 17:56	59.26
2/8/2010 17:57	59.07
2/8/2010 17:58	58.88
2/8/2010 17:59	58.87
2/8/2010 18:00	59.32
2/8/2010 18:01	59.33
2/8/2010 18:02	59.33
2/8/2010 18:03	58.96
2/8/2010 18:04	58.59
2/8/2010 18:05	58.86
2/8/2010 18:06	59.14
2/8/2010 18:07	59.42

Average 58.96541

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/8/2010 8:30	64.07	2/8/2010 10:20	64.63	2/8/2010 12:20	63.98	2/8/2010 15:30	64.12	2/8/2010 17:07	63.03
2/8/2010 8:31	64.09	2/8/2010 10:21	64.3	2/8/2010 12:21	63.65	2/8/2010 15:31	64.23	2/8/2010 17:08	63.67
2/8/2010 8:32	64.11	2/8/2010 10:22	64.57	2/8/2010 12:22	64	2/8/2010 15:32	63.39	2/8/2010 17:09	63.62
2/8/2010 8:33	64.28	2/8/2010 10:23	64.67	2/8/2010 12:23	64.37	2/8/2010 15:33	63.08	2/8/2010 17:10	63.23
2/8/2010 8:34	64.46	2/8/2010 10:24	64.47	2/8/2010 12:24	64.28	2/8/2010 15:34	63.31	2/8/2010 17:11	63.22
2/8/2010 8:35	64.25	2/8/2010 10:25	64.04	2/8/2010 12:25	63.93	2/8/2010 15:35	63.56	2/8/2010 17:12	64.01
2/8/2010 8:36	64.01	2/8/2010 10:26	64.23	2/8/2010 12:26	63.84	2/8/2010 15:36	63.86	2/8/2010 17:13	64.27
2/8/2010 8:37	63.78	2/8/2010 10:27	2.52	2/8/2010 12:27	64.28	2/8/2010 15:37	64.16	2/8/2010 17:14	63.86
2/8/2010 8:38	63.67	2/8/2010 10:28	62.08	2/8/2010 12:28	64.74	2/8/2010 15:38	63.81	2/8/2010 17:15	63.43
2/8/2010 8:39	63.57	2/8/2010 10:29	64.16	2/8/2010 12:29	64.56	2/8/2010 15:39	63.8	2/8/2010 17:16	62.67
2/8/2010 8:40	63.8	2/8/2010 10:30	64.72	2/8/2010 12:30	64.08	2/8/2010 15:40	63.5	2/8/2010 17:17	63.89
2/8/2010 8:41	63.77	2/8/2010 10:31	64.62	2/8/2010 12:31	63.58	2/8/2010 15:41	63.7	2/8/2010 17:18	64.32
2/8/2010 8:42	63.73	2/8/2010 10:32	64.49	2/8/2010 12:32	63.76	2/8/2010 15:42	63.66	2/8/2010 17:19	64.33
2/8/2010 8:43	63.7	2/8/2010 10:33	63.95	2/8/2010 12:33	63.96	2/8/2010 15:43	63.33	2/8/2010 17:20	64.19
2/8/2010 8:44	63.66	2/8/2010 10:34	64.07	2/8/2010 12:34	64.11	2/8/2010 15:44	63.41	2/8/2010 17:21	64.05
2/8/2010 8:45	63.62	2/8/2010 10:35	65.01	2/8/2010 12:35	64.25	2/8/2010 15:45	63.49	2/8/2010 17:22	64.31
2/8/2010 8:46	63.58	2/8/2010 10:36	64.63	2/8/2010 12:36	64.01	2/8/2010 15:46	63.78	2/8/2010 17:23	64.22
2/8/2010 8:47	63.82	2/8/2010 10:37	64.19	2/8/2010 12:37	64.15	2/8/2010 15:47	63.78	2/8/2010 17:24	63.67
2/8/2010 8:48	63.71	2/8/2010 10:38	63.36	2/8/2010 12:38	64.3	2/8/2010 15:48	63.79	2/8/2010 17:25	63.98
2/8/2010 8:49	63.58	2/8/2010 10:39	63.52	2/8/2010 12:39	63.84	2/8/2010 15:49	64.11	2/8/2010 17:26	63.96
2/8/2010 8:50	63.75	2/8/2010 10:40	63.73	2/8/2010 12:40	64.15	2/8/2010 15:50	63.6	2/8/2010 17:27	64.62
2/8/2010 8:51	63.66	2/8/2010 10:41	63.69	2/8/2010 12:41	63.78	2/8/2010 15:51	63.08	2/8/2010 17:28	64.5
2/8/2010 8:52	63.89	2/8/2010 10:42	64.48	2/8/2010 12:42	64.43	2/8/2010 15:52	63.3	2/8/2010 17:29	63.8
2/8/2010 8:53	63.74	2/8/2010 10:43	64.57	2/8/2010 12:43	64.21	2/8/2010 15:53	63.53	2/8/2010 17:30	63.8
2/8/2010 8:54	63.56	2/8/2010 10:44	63.71	2/8/2010 12:44	63.96	2/8/2010 15:54	63.75	2/8/2010 17:31	63.82
2/8/2010 8:55	63.77	2/8/2010 10:45	64.1	2/8/2010 12:45	63.47	2/8/2010 15:55	63.98	2/8/2010 17:32	63.83
2/8/2010 8:56	63.74	2/8/2010 10:46	63.79	2/8/2010 12:46	63.48	2/8/2010 15:56	64.21	2/8/2010 17:33	63.84
2/8/2010 8:57	63.7	2/8/2010 10:47	63.82	2/8/2010 12:47	63.68	2/8/2010 15:57	63.64	2/8/2010 17:34	64.03
2/8/2010 8:58	63.66	2/8/2010 10:48	63.86	2/8/2010 12:48	63.89	2/8/2010 15:58	63.05	2/8/2010 17:35	64.22
2/8/2010 8:59	63.9	2/8/2010 10:49	64.27	2/8/2010 12:49	63.88	2/8/2010 15:59	64.1	2/8/2010 17:36	63.73
2/8/2010 9:00	63.63	2/8/2010 10:50	63.08	2/8/2010 12:50	63.86	2/8/2010 16:00	64.1	2/8/2010 17:37	63.24
2/8/2010 9:01	63.7	2/8/2010 10:51	62.77	2/8/2010 12:51	64.14	2/8/2010 16:01	64.08	2/8/2010 17:38	63.84
2/8/2010 9:02	63.79	2/8/2010 10:52	62.51	2/8/2010 12:52	64.02	2/8/2010 16:02	64.06	2/8/2010 17:39	63.72
2/8/2010 9:03	63.76	2/8/2010 10:53	63.46	2/8/2010 12:53	63.89	2/8/2010 16:03	64.08	2/8/2010 17:40	64.4
2/8/2010 9:04	63.73	2/8/2010 10:54	63.39	2/8/2010 12:54	63.77	2/8/2010 16:04	63.82	2/8/2010 17:41	63.96
2/8/2010 9:05	63.69	2/8/2010 10:55	63.52	2/8/2010 12:55	63.84	2/8/2010 16:05	63.81	2/8/2010 17:42	63.94
2/8/2010 9:06	63.65	2/8/2010 10:56	63.37	2/8/2010 12:56	63.91	2/8/2010 16:06	64.06	2/8/2010 17:43	63.92
2/8/2010 9:07	63.71	2/8/2010 10:57	63.22	2/8/2010 12:57	63.99	2/8/2010 16:07	63.71	2/8/2010 17:44	62.93
2/8/2010 9:08	63.77	2/8/2010 10:58	63.07	2/8/2010 12:58	64.06	2/8/2010 16:08	63.98	2/8/2010 17:45	63.59
2/8/2010 9:09	63.83	2/8/2010 10:59	63.55	2/8/2010 12:59	63.33	2/8/2010 16:09	64.26	2/8/2010 17:46	64.26
2/8/2010 9:10	63.89	2/8/2010 11:00	63.6	2/8/2010 13:00	63.85	2/8/2010 16:10	63.91	2/8/2010 17:47	63.29
2/8/2010 9:11	63.77	2/8/2010 11:01	63.63	2/8/2010 13:01	63.67	2/8/2010 16:11	63.56	2/8/2010 17:48	64.13
2/8/2010 9:12	63.63	2/8/2010 11:02	63.52	2/8/2010 13:02	63.71	2/8/2010 16:12	64.14	2/8/2010 17:49	64.11
2/8/2010 9:13	63.76	2/8/2010 11:03	63.41	2/8/2010 13:03	63.75	2/8/2010 16:13	64.42	2/8/2010 17:50	64.08
2/8/2010 9:14	63.59	2/8/2010 11:04	63.52	2/8/2010 13:04	63.44	2/8/2010 16:14	64.14	2/8/2010 17:51	63.8
2/8/2010 9:15	63.92	2/8/2010 11:05	63.65	2/8/2010 13:05	63.66	2/8/2010 16:15	63.57	2/8/2010 17:52	63.52
2/8/2010 9:16	63.82	2/8/2010 11:06	64.1	2/8/2010 13:06	63.9	2/8/2010 16:16	63.77	2/8/2010 17:53	62.72
2/8/2010 9:17	64.13	2/8/2010 11:07	63.76	2/8/2010 13:07	63.8	2/8/2010 16:17	63.64	2/8/2010 17:54	63.42
2/8/2010 9:18	64.46	2/8/2010 11:08	63.84	2/8/2010 13:08	63.7	2/8/2010 16:18	63.9	2/8/2010 17:55	64.13
2/8/2010 9:19	64.23	2/8/2010 11:09	63.94	2/8/2010 13:09	63.6	2/8/2010 16:19	64.17	2/8/2010 17:56	64.37
2/8/2010 9:20	64.18	2/8/2010 11:10	63.85	2/8/2010 13:10	63.67	2/8/2010 16:20	63.76	2/8/2010 17:57	63.72
2/8/2010 9:21	64.15	2/8/2010 11:11	64.11	2/8/2010 13:11	63.75	2/8/2010 16:21	63.81	2/8/2010 17:58	63.67
2/8/2010 9:22	64.38	2/8/2010 11:12	63.83	2/8/2010 13:12	63.15	2/8/2010 16:22	63.87	2/8/2010 17:59	64.03
2/8/2010 9:23	64.23	2/8/2010 11:13	64.36	2/8/2010 13:13	64.07	2/8/2010 16:23	64.49	2/8/2010 18:00	64.38
2/8/2010 9:24	64.36	2/8/2010 11:14	64.52	2/8/2010 13:14	63.51	2/8/2010 16:24	63.79	2/8/2010 18:01	64.07
2/8/2010 9:25	64.16	2/8/2010 11:15	63.96	2/8/2010 13:15	63.62	2/8/2010 16:25	62.66	2/8/2010 18:02	64.02
2/8/2010 9:26	63.95	2/8/2010 11:16	64.42	2/8/2010 13:16	63.74	2/8/2010 16:26	63.83	2/8/2010 18:03	63.98
2/8/2010 9:27	63.93	2/8/2010 11:17	64.36	2/8/2010 13:17	63.87	2/8/2010 16:27	63.75	2/8/2010 18:04	63.59
2/8/2010 9:28	63.91	2/8/2010 11:18	64.28	2/8/2010 13:18	63.76	2/8/2010 16:28	64.15	2/8/2010 18:05	63.85
2/8/2010 9:29	63.9	2/8/2010 11:19	64.49	2/8/2010 13:19	63.64	2/8/2010 16:29	64.55	2/8/2010 18:06	64.1
2/8/2010 9:30	63.99	2/8/2010 11:20	64.71	2/8/2010 13:20	63.53	2/8/2010 16:30	63.16	2/8/2010 18:07	64.07
Average	63.87262	Average	62.92213	Average	63.88197	Average	63.78869	Average	63.85197

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/8/2010 8:30	64.05	2/8/2010 10:20	64.44	2/8/2010 12:20	63.92	2/8/2010 15:30	64.22	2/8/2010 17:07	63.11
2/8/2010 8:31	64.16	2/8/2010 10:21	64.69	2/8/2010 12:21	63.76	2/8/2010 15:31	63.96	2/8/2010 17:08	63.87
2/8/2010 8:32	63.82	2/8/2010 10:22	64.96	2/8/2010 12:22	64.48	2/8/2010 15:32	63.37	2/8/2010 17:09	63.89
2/8/2010 8:33	64.13	2/8/2010 10:23	64.64	2/8/2010 12:23	64.42	2/8/2010 15:33	63.16	2/8/2010 17:10	63.2
2/8/2010 8:34	64.48	2/8/2010 10:24	64.29	2/8/2010 12:24	64.33	2/8/2010 15:34	63.39	2/8/2010 17:11	63.39
2/8/2010 8:35	64.43	2/8/2010 10:25	64.31	2/8/2010 12:25	64	2/8/2010 15:35	63.63	2/8/2010 17:12	64.05
2/8/2010 8:36	63.91	2/8/2010 10:26	64.35	2/8/2010 12:26	64.03	2/8/2010 15:36	64.14	2/8/2010 17:13	64.37
2/8/2010 8:37	63.84	2/8/2010 10:27	2.52	2/8/2010 12:27	64.06	2/8/2010 15:37	63.94	2/8/2010 17:14	63.99
2/8/2010 8:38	63.79	2/8/2010 10:28	62.22	2/8/2010 12:28	64.33	2/8/2010 15:38	63.74	2/8/2010 17:15	63.59
2/8/2010 8:39	63.81	2/8/2010 10:29	64.44	2/8/2010 12:29	64.6	2/8/2010 15:39	63.72	2/8/2010 17:16	62.76
2/8/2010 8:40	63.82	2/8/2010 10:30	64.46	2/8/2010 12:30	64.15	2/8/2010 15:40	63.71	2/8/2010 17:17	63.93
2/8/2010 8:41	63.84	2/8/2010 10:31	64.84	2/8/2010 12:31	63.68	2/8/2010 15:41	63.69	2/8/2010 17:18	64.23
2/8/2010 8:42	63.59	2/8/2010 10:32	64.13	2/8/2010 12:32	63.77	2/8/2010 15:42	63.68	2/8/2010 17:19	64.24
2/8/2010 8:43	63.67	2/8/2010 10:33	63.99	2/8/2010 12:33	63.88	2/8/2010 15:43	63.32	2/8/2010 17:20	63.78
2/8/2010 8:44	63.76	2/8/2010 10:34	63.87	2/8/2010 12:34	64.17	2/8/2010 15:44	63.62	2/8/2010 17:21	64.01
2/8/2010 8:45	63.37	2/8/2010 10:35	65.04	2/8/2010 12:35	64.47	2/8/2010 15:45	63.48	2/8/2010 17:22	64.26
2/8/2010 8:46	63.42	2/8/2010 10:36	64.57	2/8/2010 12:36	64.21	2/8/2010 15:46	63.63	2/8/2010 17:23	64.17
2/8/2010 8:47	63.23	2/8/2010 10:37	64.02	2/8/2010 12:37	64.23	2/8/2010 15:47	63.79	2/8/2010 17:24	63.64
2/8/2010 8:48	63.52	2/8/2010 10:38	63.26	2/8/2010 12:38	64.26	2/8/2010 15:48	64.19	2/8/2010 17:25	64.06
2/8/2010 8:49	63.84	2/8/2010 10:39	63.38	2/8/2010 12:39	63.87	2/8/2010 15:49	64.26	2/8/2010 17:26	64.03
2/8/2010 8:50	63.82	2/8/2010 10:40	63.55	2/8/2010 12:40	64.21	2/8/2010 15:50	63.6	2/8/2010 17:27	64.61
2/8/2010 8:51	63.4	2/8/2010 10:41	63.71	2/8/2010 12:41	63.54	2/8/2010 15:51	63.45	2/8/2010 17:28	64.44
2/8/2010 8:52	63.52	2/8/2010 10:42	64.69	2/8/2010 12:42	64.38	2/8/2010 15:52	63.3	2/8/2010 17:29	63.85
2/8/2010 8:53	63.66	2/8/2010 10:43	64.22	2/8/2010 12:43	64.12	2/8/2010 15:53	63.51	2/8/2010 17:30	63.7
2/8/2010 8:54	64.17	2/8/2010 10:44	63.68	2/8/2010 12:44	63.83	2/8/2010 15:54	63.73	2/8/2010 17:31	63.99
2/8/2010 8:55	63.23	2/8/2010 10:45	64.16	2/8/2010 12:45	63.54	2/8/2010 15:55	63.95	2/8/2010 17:32	63.93
2/8/2010 8:56	63.87	2/8/2010 10:46	64.34	2/8/2010 12:46	63.59	2/8/2010 15:56	63.7	2/8/2010 17:33	64.03
2/8/2010 8:57	63.41	2/8/2010 10:47	63.76	2/8/2010 12:47	63.65	2/8/2010 15:57	63.46	2/8/2010 17:34	64.13
2/8/2010 8:58	63.89	2/8/2010 10:48	63.9	2/8/2010 12:48	63.71	2/8/2010 15:58	63.21	2/8/2010 17:35	64.23
2/8/2010 8:59	63.74	2/8/2010 10:49	64.39	2/8/2010 12:49	63.77	2/8/2010 15:59	63.72	2/8/2010 17:36	63.79
2/8/2010 9:00	64.15	2/8/2010 10:50	63.08	2/8/2010 12:50	63.83	2/8/2010 16:00	64.25	2/8/2010 17:37	63.35
2/8/2010 9:01	64.13	2/8/2010 10:51	62.71	2/8/2010 12:51	64.04	2/8/2010 16:01	64.05	2/8/2010 17:38	63.63
2/8/2010 9:02	64.09	2/8/2010 10:52	62.72	2/8/2010 12:52	63.98	2/8/2010 16:02	63.84	2/8/2010 17:39	63.91
2/8/2010 9:03	64.41	2/8/2010 10:53	63.31	2/8/2010 12:53	63.91	2/8/2010 16:03	63.83	2/8/2010 17:40	64.2
2/8/2010 9:04	64.09	2/8/2010 10:54	63.5	2/8/2010 12:54	63.85	2/8/2010 16:04	63.82	2/8/2010 17:41	64.09
2/8/2010 9:05	63.73	2/8/2010 10:55	63.14	2/8/2010 12:55	63.66	2/8/2010 16:05	63.81	2/8/2010 17:42	63.99
2/8/2010 9:06	64.26	2/8/2010 10:56	63.16	2/8/2010 12:56	64.06	2/8/2010 16:06	64.1	2/8/2010 17:43	63.89
2/8/2010 9:07	64.15	2/8/2010 10:57	63.2	2/8/2010 12:57	63.79	2/8/2010 16:07	63.69	2/8/2010 17:44	62.92
2/8/2010 9:08	64.01	2/8/2010 10:58	63.24	2/8/2010 12:58	63.9	2/8/2010 16:08	63.93	2/8/2010 17:45	63.78
2/8/2010 9:09	63.87	2/8/2010 10:59	63.45	2/8/2010 12:59	63.45	2/8/2010 16:09	64.17	2/8/2010 17:46	63.96
2/8/2010 9:10	63.97	2/8/2010 11:00	63.67	2/8/2010 13:00	63.62	2/8/2010 16:10	64.01	2/8/2010 17:47	63.32
2/8/2010 9:11	64.08	2/8/2010 11:01	63.55	2/8/2010 13:01	63.81	2/8/2010 16:11	63.48	2/8/2010 17:48	64.02
2/8/2010 9:12	64.39	2/8/2010 11:02	63.54	2/8/2010 13:02	63.81	2/8/2010 16:12	64.18	2/8/2010 17:49	63.9
2/8/2010 9:13	64.14	2/8/2010 11:03	63.55	2/8/2010 13:03	63.8	2/8/2010 16:13	64.54	2/8/2010 17:50	64.34
2/8/2010 9:14	64.71	2/8/2010 11:04	63.49	2/8/2010 13:04	63.33	2/8/2010 16:14	64.22	2/8/2010 17:51	64.15
2/8/2010 9:15	64.27	2/8/2010 11:05	63.43	2/8/2010 13:05	63.82	2/8/2010 16:15	63.6	2/8/2010 17:52	63.53
2/8/2010 9:16	63.79	2/8/2010 11:06	64.18	2/8/2010 13:06	63.94	2/8/2010 16:16	63.73	2/8/2010 17:53	62.91
2/8/2010 9:17	64.32	2/8/2010 11:07	63.78	2/8/2010 13:07	63.42	2/8/2010 16:17	63.52	2/8/2010 17:54	63.53
2/8/2010 9:18	64.43	2/8/2010 11:08	63.65	2/8/2010 13:08	63.43	2/8/2010 16:18	63.91	2/8/2010 17:55	64.15
2/8/2010 9:19	63.99	2/8/2010 11:09	64.06	2/8/2010 13:09	63.78	2/8/2010 16:19	64.32	2/8/2010 17:56	64.39
2/8/2010 9:20	64.28	2/8/2010 11:10	64.01	2/8/2010 13:10	63.73	2/8/2010 16:20	63.98	2/8/2010 17:57	63.82
2/8/2010 9:21	64.25	2/8/2010 11:11	64.19	2/8/2010 13:11	63.66	2/8/2010 16:21	63.63	2/8/2010 17:58	63.55
2/8/2010 9:22	64.44	2/8/2010 11:12	63.96	2/8/2010 13:12	63.25	2/8/2010 16:22	64.09	2/8/2010 17:59	63.74
2/8/2010 9:23	64.34	2/8/2010 11:13	64.32	2/8/2010 13:13	63.86	2/8/2010 16:23	64.28	2/8/2010 18:00	64.27
2/8/2010 9:24	64.22	2/8/2010 11:14	64.69	2/8/2010 13:14	63.52	2/8/2010 16:24	63.9	2/8/2010 18:01	64.07
2/8/2010 9:25	64.1	2/8/2010 11:15	64.04	2/8/2010 13:15	63.46	2/8/2010 16:25	62.9	2/8/2010 18:02	64.15
2/8/2010 9:26	63.99	2/8/2010 11:16	64.63	2/8/2010 13:16	63.42	2/8/2010 16:26	63.78	2/8/2010 18:03	63.84
2/8/2010 9:27	63.87	2/8/2010 11:17	64.33	2/8/2010 13:17	63.78	2/8/2010 16:27	63.79	2/8/2010 18:04	63.52
2/8/2010 9:28	63.92	2/8/2010 11:18	64.54	2/8/2010 13:18	63.73	2/8/2010 16:28	64.17	2/8/2010 18:05	63.86
2/8/2010 9:29	63.97	2/8/2010 11:19	64.3	2/8/2010 13:19	63.67	2/8/2010 16:29	64.21	2/8/2010 18:06	64.05
2/8/2010 9:30	64.02	2/8/2010 11:20	64.6	2/8/2010 13:20	63.6	2/8/2010 16:30	63.16	2/8/2010 18:07	64.24
Average	63.96016	Average	62.9318	Average	63.86672	Average	63.78951	Average	63.87443

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/8/2010 8:30	63.93	2/8/2010 10:20	64.44	2/8/2010 12:20	63.76	2/8/2010 15:30	64.21	2/8/2010 17:07	63.1
2/8/2010 8:31	63.99	2/8/2010 10:21	64.43	2/8/2010 12:21	63.8	2/8/2010 15:31	63.89	2/8/2010 17:08	63.79
2/8/2010 8:32	64.05	2/8/2010 10:22	64.41	2/8/2010 12:22	63.85	2/8/2010 15:32	63.55	2/8/2010 17:09	63.57
2/8/2010 8:33	64.1	2/8/2010 10:23	64.39	2/8/2010 12:23	63.89	2/8/2010 15:33	63.21	2/8/2010 17:10	63.34
2/8/2010 8:34	64.16	2/8/2010 10:24	64.38	2/8/2010 12:24	63.93	2/8/2010 15:34	63.38	2/8/2010 17:11	63.12
2/8/2010 8:35	64.22	2/8/2010 10:25	64.36	2/8/2010 12:25	63.98	2/8/2010 15:35	63.56	2/8/2010 17:12	63.71
2/8/2010 8:36	64.15	2/8/2010 10:26	64.35	2/8/2010 12:26	64.02	2/8/2010 15:36	63.74	2/8/2010 17:13	64.31
2/8/2010 8:37	64.08	2/8/2010 10:27	2.52	2/8/2010 12:27	64.06	2/8/2010 15:37	63.92	2/8/2010 17:14	63.72
2/8/2010 8:38	64	2/8/2010 10:28	61.76	2/8/2010 12:28	64.1	2/8/2010 15:38	63.87	2/8/2010 17:15	63.13
2/8/2010 8:39	63.92	2/8/2010 10:29	64.27	2/8/2010 12:29	64.15	2/8/2010 15:39	63.82	2/8/2010 17:16	62.53
2/8/2010 8:40	63.85	2/8/2010 10:30	64.27	2/8/2010 12:30	64.19	2/8/2010 15:40	63.77	2/8/2010 17:17	63.97
2/8/2010 8:41	63.77	2/8/2010 10:31	64.27	2/8/2010 12:31	64.2	2/8/2010 15:41	63.71	2/8/2010 17:18	63.99
2/8/2010 8:42	63.7	2/8/2010 10:32	64.26	2/8/2010 12:32	64.22	2/8/2010 15:42	63.66	2/8/2010 17:19	64
2/8/2010 8:43	63.62	2/8/2010 10:33	64.26	2/8/2010 12:33	64.23	2/8/2010 15:43	63.61	2/8/2010 17:20	64.01
2/8/2010 8:44	63.65	2/8/2010 10:34	64.26	2/8/2010 12:34	64.24	2/8/2010 15:44	63.56	2/8/2010 17:21	64.02
2/8/2010 8:45	63.69	2/8/2010 10:35	64.25	2/8/2010 12:35	64.26	2/8/2010 15:45	63.5	2/8/2010 17:22	64.03
2/8/2010 8:46	63.73	2/8/2010 10:36	64.25	2/8/2010 12:36	64.27	2/8/2010 15:46	63.66	2/8/2010 17:23	64.03
2/8/2010 8:47	63.77	2/8/2010 10:37	64.25	2/8/2010 12:37	64.29	2/8/2010 15:47	63.82	2/8/2010 17:24	64.04
2/8/2010 8:48	63.81	2/8/2010 10:38	64.24	2/8/2010 12:38	64.3	2/8/2010 15:48	63.99	2/8/2010 17:25	64.05
2/8/2010 8:49	63.85	2/8/2010 10:39	64.24	2/8/2010 12:39	63.71	2/8/2010 15:49	64.15	2/8/2010 17:26	64.06
2/8/2010 8:50	63.89	2/8/2010 10:40	64.24	2/8/2010 12:40	63.75	2/8/2010 15:50	63.86	2/8/2010 17:27	64.24
2/8/2010 8:51	63.93	2/8/2010 10:41	64.23	2/8/2010 12:41	63.81	2/8/2010 15:51	63.57	2/8/2010 17:28	64.43
2/8/2010 8:52	63.97	2/8/2010 10:42	64.23	2/8/2010 12:42	63.87	2/8/2010 15:52	63.27	2/8/2010 17:29	64.13
2/8/2010 8:53	64.01	2/8/2010 10:43	64.23	2/8/2010 12:43	63.93	2/8/2010 15:53	63.47	2/8/2010 17:30	63.83
2/8/2010 8:54	64.05	2/8/2010 10:44	64.22	2/8/2010 12:44	63.99	2/8/2010 15:54	63.67	2/8/2010 17:31	63.92
2/8/2010 8:55	63.85	2/8/2010 10:45	64.22	2/8/2010 12:45	63.96	2/8/2010 15:55	63.88	2/8/2010 17:32	64.02
2/8/2010 8:56	63.63	2/8/2010 10:46	64.22	2/8/2010 12:46	63.93	2/8/2010 15:56	64.08	2/8/2010 17:33	64.11
2/8/2010 8:57	63.41	2/8/2010 10:47	64.21	2/8/2010 12:47	63.9	2/8/2010 15:57	63.51	2/8/2010 17:34	64.21
2/8/2010 8:58	63.5	2/8/2010 10:48	64.21	2/8/2010 12:48	63.87	2/8/2010 15:58	62.92	2/8/2010 17:35	64.3
2/8/2010 8:59	63.6	2/8/2010 10:49	64.21	2/8/2010 12:49	63.84	2/8/2010 15:59	63.52	2/8/2010 17:36	63.78
2/8/2010 9:00	63.7	2/8/2010 10:50	63.41	2/8/2010 12:50	63.81	2/8/2010 16:00	64.14	2/8/2010 17:37	63.25
2/8/2010 9:01	63.8	2/8/2010 10:51	62.58	2/8/2010 12:51	63.78	2/8/2010 16:01	64.13	2/8/2010 17:38	63.66
2/8/2010 9:02	63.89	2/8/2010 10:52	62.71	2/8/2010 12:52	63.76	2/8/2010 16:02	64.12	2/8/2010 17:39	64.07
2/8/2010 9:03	63.99	2/8/2010 10:53	62.88	2/8/2010 12:53	63.73	2/8/2010 16:03	64.11	2/8/2010 17:40	64.49
2/8/2010 9:04	64.09	2/8/2010 10:54	63.05	2/8/2010 12:54	63.7	2/8/2010 16:04	64.1	2/8/2010 17:41	64.34
2/8/2010 9:05	64.13	2/8/2010 10:55	63.23	2/8/2010 12:55	63.67	2/8/2010 16:05	64.09	2/8/2010 17:42	64.18
2/8/2010 9:06	64.16	2/8/2010 10:56	63.26	2/8/2010 12:56	63.64	2/8/2010 16:06	64.08	2/8/2010 17:43	64.02
2/8/2010 9:07	64.2	2/8/2010 10:57	63.28	2/8/2010 12:57	63.61	2/8/2010 16:07	64.07	2/8/2010 17:44	62.99
2/8/2010 9:08	64.23	2/8/2010 10:58	63.3	2/8/2010 12:58	63.58	2/8/2010 16:08	64.05	2/8/2010 17:45	63.46
2/8/2010 9:09	64.26	2/8/2010 10:59	63.33	2/8/2010 12:59	63.55	2/8/2010 16:09	64.04	2/8/2010 17:46	63.95
2/8/2010 9:10	64.3	2/8/2010 11:00	63.35	2/8/2010 13:00	63.52	2/8/2010 16:10	64.03	2/8/2010 17:47	63.32
2/8/2010 9:11	64.33	2/8/2010 11:01	63.37	2/8/2010 13:01	63.49	2/8/2010 16:11	64.02	2/8/2010 17:48	64.13
2/8/2010 9:12	64.33	2/8/2010 11:02	63.4	2/8/2010 13:02	63.46	2/8/2010 16:12	64.01	2/8/2010 17:49	63.96
2/8/2010 9:13	64.33	2/8/2010 11:03	63.42	2/8/2010 13:03	63.43	2/8/2010 16:13	64.02	2/8/2010 17:50	63.79
2/8/2010 9:14	64.33	2/8/2010 11:04	63.44	2/8/2010 13:04	63.4	2/8/2010 16:14	64.04	2/8/2010 17:51	63.61
2/8/2010 9:15	64.33	2/8/2010 11:05	63.47	2/8/2010 13:05	63.45	2/8/2010 16:15	64.06	2/8/2010 17:52	63.44
2/8/2010 9:16	64.29	2/8/2010 11:06	63.69	2/8/2010 13:06	63.49	2/8/2010 16:16	64.07	2/8/2010 17:53	62.9
2/8/2010 9:17	64.24	2/8/2010 11:07	63.92	2/8/2010 13:07	63.53	2/8/2010 16:17	64.09	2/8/2010 17:54	63.62
2/8/2010 9:18	64.21	2/8/2010 11:08	63.99	2/8/2010 13:08	63.58	2/8/2010 16:18	64.11	2/8/2010 17:55	64.35
2/8/2010 9:19	64.17	2/8/2010 11:09	64.06	2/8/2010 13:09	63.62	2/8/2010 16:19	64.09	2/8/2010 17:56	64.16
2/8/2010 9:20	64.13	2/8/2010 11:10	64.12	2/8/2010 13:10	63.67	2/8/2010 16:20	64.07	2/8/2010 17:57	63.95
2/8/2010 9:21	64.1	2/8/2010 11:11	64.19	2/8/2010 13:11	63.71	2/8/2010 16:21	64.06	2/8/2010 17:58	63.75
2/8/2010 9:22	64.08	2/8/2010 11:12	64.25	2/8/2010 13:12	63.33	2/8/2010 16:22	64.04	2/8/2010 17:59	63.78
2/8/2010 9:23	64.02	2/8/2010 11:13	64.32	2/8/2010 13:13	64.11	2/8/2010 16:23	64.47	2/8/2010 18:00	63.82
2/8/2010 9:24	63.99	2/8/2010 11:14	64.39	2/8/2010 13:14	63.98	2/8/2010 16:24	63.52	2/8/2010 18:01	63.85
2/8/2010 9:25	63.95	2/8/2010 11:15	63.88	2/8/2010 13:15	63.82	2/8/2010 16:25	62.55	2/8/2010 18:02	63.88
2/8/2010 9:26	63.91	2/8/2010 11:16	64.61	2/8/2010 13:16	63.66	2/8/2010 16:26	63.68	2/8/2010 18:03	63.92
2/8/2010 9:27	63.88	2/8/2010 11:17	64.69	2/8/2010 13:17	63.58	2/8/2010 16:27	63.87	2/8/2010 18:04	63.96
2/8/2010 9:28	63.84	2/8/2010 11:18	64.75	2/8/2010 13:18	63.49	2/8/2010 16:28	64.04	2/8/2010 18:05	64
2/8/2010 9:29	63.8	2/8/2010 11:19	64.81	2/8/2010 13:19	63.4	2/8/2010 16:29	64.22	2/8/2010 18:06	64.04
2/8/2010 9:30	63.77	2/8/2010 11:20	64.87	2/8/2010 13:20	63.32	2/8/2010 16:30	63.16	2/8/2010 18:07	64.08
Average	63.9777	Average	62.95246	Average	63.80607	Average	63.82754	Average	63.83951

Total SUM	250.7954	Total SUM	246.888	Total SUM	250.4597	Total SUM	250.2966	Total SUM	250.5313
-----------	----------	-----------	---------	-----------	----------	-----------	----------	-----------	----------

OPACITY - UNIT 3

Run 13	
Date/Time	MPP3 OPACITY Value
02/08/2010 08:30	5.13
02/08/2010 08:36	5.02
02/08/2010 08:42	4.73
02/08/2010 08:48	4.82
02/08/2010 08:54	5.24
02/08/2010 09:00	4.81
02/08/2010 09:06	4.66
02/08/2010 09:12	4.98
02/08/2010 09:18	5.03
02/08/2010 09:24	4.71
02/08/2010 09:30	4.66

Run 14	
Date/Time	MPP3 OPACITY Value
02/08/2010 10:18	4.90
02/08/2010 10:24	4.80
02/08/2010 10:30	4.33
02/08/2010 10:36	4.46
02/08/2010 10:42	4.80
02/08/2010 10:48	4.39
02/08/2010 10:54	4.13
02/08/2010 11:00	4.50
02/08/2010 11:06	4.70
02/08/2010 11:12	4.28
02/08/2010 11:18	4.22
02/08/2010 11:24	4.52

Run 15	
Date/Time	MPP3 OPACITY Value
02/08/2010 12:18	3.97
02/08/2010 12:24	4.13
02/08/2010 12:30	4.10
02/08/2010 12:36	3.68
02/08/2010 12:42	3.58
02/08/2010 12:48	3.95
02/08/2010 12:54	3.93
02/08/2010 13:00	3.66
02/08/2010 13:06	3.49
02/08/2010 13:12	4.03
02/08/2010 13:18	3.65
02/08/2010 13:24	3.54

Run 16	
Date/Time	MPP3 OPACITY Value
02/08/2010 15:30	3.52
02/08/2010 15:36	3.64
02/08/2010 15:42	3.88
02/08/2010 15:48	3.48
02/08/2010 15:54	3.59
02/08/2010 16:00	3.85
02/08/2010 16:06	3.82
02/08/2010 16:12	3.40
02/08/2010 16:18	3.74
02/08/2010 16:24	3.82
02/08/2010 16:30	3.65

OPACITY - UNIT 3

Run 17	
Date/Time	MPP3 OPACITY Value
02/08/2010 17:06	3.95
02/08/2010 17:12	3.72
02/08/2010 17:18	3.79
02/08/2010 17:24	3.72
02/08/2010 17:30	3.69
02/08/2010 17:36	3.85
02/08/2010 17:42	3.74
02/08/2010 17:48	3.87
02/08/2010 17:54	3.70
02/08/2010 18:00	3.67
02/08/2010 18:06	3.90
02/08/2010 18:12	4.06

98

February 9, 2010

Run 18	
Date/Time	MPP3 SO2#/MM Value
02/09/2010 06:18	0.427
02/09/2010 06:19	0.401
02/09/2010 06:20	
02/09/2010 06:21	
02/09/2010 06:22	
02/09/2010 06:23	
02/09/2010 06:24	
02/09/2010 06:25	0.432
02/09/2010 06:26	0.446
02/09/2010 06:27	0.457
02/09/2010 06:28	0.468
02/09/2010 06:29	0.477
02/09/2010 06:30	0.488
02/09/2010 06:31	0.478
02/09/2010 06:32	0.437
02/09/2010 06:33	0.384
02/09/2010 06:34	0.360
02/09/2010 06:35	
02/09/2010 06:36	
02/09/2010 06:37	
02/09/2010 06:38	
02/09/2010 06:39	
02/09/2010 06:40	0.411
02/09/2010 06:41	0.424
02/09/2010 06:42	0.434
02/09/2010 06:43	0.447
02/09/2010 06:44	0.451
02/09/2010 06:45	0.448
02/09/2010 06:46	0.440
02/09/2010 06:47	0.410
02/09/2010 06:48	0.382
02/09/2010 06:49	0.374
02/09/2010 06:50	
02/09/2010 06:51	
02/09/2010 06:52	
02/09/2010 06:53	
02/09/2010 06:54	
02/09/2010 06:55	0.414
02/09/2010 06:56	0.427
02/09/2010 06:57	0.426
02/09/2010 06:58	0.434
02/09/2010 06:59	0.445
02/09/2010 07:00	0.419
02/09/2010 07:01	0.388
02/09/2010 07:02	0.360
02/09/2010 07:03	0.353
02/09/2010 07:04	0.359
02/09/2010 07:05	
02/09/2010 07:06	
02/09/2010 07:07	
02/09/2010 07:08	
02/09/2010 07:09	
02/09/2010 07:10	0.396
02/09/2010 07:11	0.409
02/09/2010 07:12	0.419
02/09/2010 07:13	0.424
02/09/2010 07:14	0.409
02/09/2010 07:15	0.365
02/09/2010 07:16	0.338
02/09/2010 07:17	0.330
02/09/2010 07:18	0.338

Run 19	
Date/Time	MPP3 SO2#/MM Value
02/09/2010 08:05	
02/09/2010 08:06	
02/09/2010 08:07	
02/09/2010 08:08	
02/09/2010 08:09	
02/09/2010 08:10	0.354
02/09/2010 08:11	0.308
02/09/2010 08:12	0.279
02/09/2010 08:13	0.278
02/09/2010 08:14	0.290
02/09/2010 08:15	0.301
02/09/2010 08:16	0.314
02/09/2010 08:17	0.328
02/09/2010 08:18	0.343
02/09/2010 08:19	0.354
02/09/2010 08:20	
02/09/2010 08:21	
02/09/2010 08:22	
02/09/2010 08:23	
02/09/2010 08:24	
02/09/2010 08:25	0.358
02/09/2010 08:26	0.324
02/09/2010 08:27	0.304
02/09/2010 08:28	0.303
02/09/2010 08:29	0.311
02/09/2010 08:30	0.320
02/09/2010 08:31	0.340
02/09/2010 08:32	0.342
02/09/2010 08:33	0.350
02/09/2010 08:34	0.355
02/09/2010 08:35	
02/09/2010 08:36	
02/09/2010 08:37	
02/09/2010 08:38	
02/09/2010 08:39	
02/09/2010 08:40	0.350
02/09/2010 08:41	0.307
02/09/2010 08:42	0.293
02/09/2010 08:43	0.296
02/09/2010 08:44	0.305
02/09/2010 08:45	0.303
02/09/2010 08:46	0.297
02/09/2010 08:47	0.312
02/09/2010 08:48	0.327
02/09/2010 08:49	0.342
02/09/2010 08:50	
02/09/2010 08:51	
02/09/2010 08:52	
02/09/2010 08:53	
02/09/2010 08:54	
02/09/2010 08:55	0.402
02/09/2010 08:56	0.378
02/09/2010 08:57	0.323
02/09/2010 08:58	0.278
02/09/2010 08:59	0.269
02/09/2010 09:00	0.275
02/09/2010 09:01	0.281
02/09/2010 09:02	0.297
02/09/2010 09:03	0.311
02/09/2010 09:04	0.325
02/09/2010 09:05	

Run 20	
Date/Time	MPP3 SO2#/MM Value
02/09/2010 09:55	0.337
02/09/2010 09:56	0.346
02/09/2010 09:57	0.362
02/09/2010 09:58	0.363
02/09/2010 09:59	0.368
02/09/2010 10:00	0.375
02/09/2010 10:01	0.383
02/09/2010 10:02	0.376
02/09/2010 10:03	0.336
02/09/2010 10:04	0.294
02/09/2010 10:05	
02/09/2010 10:06	
02/09/2010 10:07	
02/09/2010 10:08	
02/09/2010 10:09	
02/09/2010 10:10	0.303
02/09/2010 10:11	
02/09/2010 10:12	
02/09/2010 10:13	
02/09/2010 10:14	
02/09/2010 10:15	
02/09/2010 10:16	
02/09/2010 10:17	
02/09/2010 10:18	
02/09/2010 10:19	
02/09/2010 10:20	
02/09/2010 10:21	
02/09/2010 10:22	
02/09/2010 10:23	
02/09/2010 10:24	
02/09/2010 10:25	
02/09/2010 10:26	
02/09/2010 10:27	
02/09/2010 10:28	
02/09/2010 10:29	
02/09/2010 10:30	
02/09/2010 10:31	0.384
02/09/2010 10:32	0.396
02/09/2010 10:33	0.408
02/09/2010 10:34	0.403
02/09/2010 10:35	
02/09/2010 10:36	
02/09/2010 10:37	
02/09/2010 10:38	
02/09/2010 10:39	
02/09/2010 10:40	0.311
02/09/2010 10:41	0.326
02/09/2010 10:42	0.336
02/09/2010 10:43	0.347
02/09/2010 10:44	0.365
02/09/2010 10:45	0.371
02/09/2010 10:46	0.371
02/09/2010 10:47	0.383
02/09/2010 10:48	0.388
02/09/2010 10:49	0.403
02/09/2010 10:50	
02/09/2010 10:51	
02/09/2010 10:52	
02/09/2010 10:53	
02/09/2010 10:54	
02/09/2010 10:55	0.310

Run 21	
Date/Time	MPP3 SO2#/MM Value
02/09/2010 11:40	0.316
02/09/2010 11:41	0.327
02/09/2010 11:42	0.341
02/09/2010 11:43	0.350
02/09/2010 11:44	0.366
02/09/2010 11:45	0.381
02/09/2010 11:46	0.386
02/09/2010 11:47	0.395
02/09/2010 11:48	0.410
02/09/2010 11:49	0.412
02/09/2010 11:50	
02/09/2010 11:51	
02/09/2010 11:52	
02/09/2010 11:53	
02/09/2010 11:54	
02/09/2010 11:55	0.319
02/09/2010 11:56	0.333
02/09/2010 11:57	0.346
02/09/2010 11:58	0.348
02/09/2010 11:59	0.359
02/09/2010 12:00	0.367
02/09/2010 12:01	0.383
02/09/2010 12:02	0.397
02/09/2010 12:03	0.414
02/09/2010 12:04	0.415
02/09/2010 12:05	
02/09/2010 12:06	
02/09/2010 12:07	
02/09/2010 12:08	
02/09/2010 12:09	
02/09/2010 12:10	0.404
02/09/2010 12:11	0.419
02/09/2010 12:12	0.398
02/09/2010 12:13	0.338
02/09/2010 12:14	0.304
02/09/2010 12:15	0.306
02/09/2010 12:16	0.314
02/09/2010 12:17	0.321
02/09/2010 12:18	0.336
02/09/2010 12:19	0.348
02/09/2010 12:20	
02/09/2010 12:21	
02/09/2010 12:22	
02/09/2010 12:23	
02/09/2010 12:24	
02/09/2010 12:25	0.404
02/09/2010 12:26	0.362
02/09/2010 12:27	0.322
02/09/2010 12:28	0.307
02/09/2010 12:29	0.310
02/09/2010 12:30	0.319
02/09/2010 12:31	0.328
02/09/2010 12:32	0.337
02/09/2010 12:33	0.349
02/09/2010 12:34	0.360
02/09/2010 12:35	
02/09/2010 12:36	
02/09/2010 12:37	
02/09/2010 12:38	
02/09/2010 12:39	
02/09/2010 12:40	0.355

Run 22	
Date/Time	MPP3 SO2#/MM Value
02/09/2010 13:25	0.342
02/09/2010 13:26	0.353
02/09/2010 13:27	0.372
02/09/2010 13:28	0.389
02/09/2010 13:29	0.396
02/09/2010 13:30	0.400
02/09/2010 13:31	0.380
02/09/2010 13:32	0.342
02/09/2010 13:33	0.314
02/09/2010 13:34	0.306
02/09/2010 13:35	
02/09/2010 13:36	
02/09/2010 13:37	
02/09/2010 13:38	
02/09/2010 13:39	
02/09/2010 13:40	0.358
02/09/2010 13:41	0.372
02/09/2010 13:42	0.388
02/09/2010 13:43	0.393
02/09/2010 13:44	0.396
02/09/2010 13:45	0.386
02/09/2010 13:46	0.329
02/09/2010 13:47	0.313
02/09/2010 13:48	0.312
02/09/2010 13:49	0.317
02/09/2010 13:50	
02/09/2010 13:51	
02/09/2010 13:52	
02/09/2010 13:53	
02/09/2010 13:54	
02/09/2010 13:55	0.388
02/09/2010 13:56	0.400
02/09/2010 13:57	0.408
02/09/2010 13:58	0.380
02/09/2010 13:59	0.333
02/09/2010 14:00	0.306
02/09/2010 14:01	0.304
02/09/2010 14:02	0.308
02/09/2010 14:03	0.317
02/09/2010 14:04	0.326
02/09/2010 14:05	
02/09/2010 14:06	
02/09/2010 14:07	
02/09/2010 14:08	
02/09/2010 14:09	
02/09/2010 14:10	0.389
02/09/2010 14:11	0.397
02/09/2010 14:12	0.376
02/09/2010 14:13	0.338
02/09/2010 14:14	0.308
02/09/2010 14:15	0.308
02/09/2010 14:16	0.316
02/09/2010 14:17	0.322
02/09/2010 14:18	0.330
02/09/2010 14:19	0.337
02/09/2010 14:20	
02/09/2010 14:21	
02/09/2010 14:22	
02/09/2010 14:23	
02/09/2010 14:24	
02/09/2010 14:25	0.365

Invalid data: either a daily calibration check or a blowback period
 Invalid data: calibration check or maintenance

Blowback Times:
 5
 15 minutes 20
 35
 5 minutes BB 50

Run 18

Coal Flow Coal Flow kpph
Total SUM 221.8482

Run 19

Coal Flow Coal Flow kpph
Total SUM 223.1244

Run 20

Coal Flow Coal Flow kpph
Total SUM 223.9113

Run 21

Coal Flow Coal Flow kpph
Total SUM 225.5203

Run 22

Coal Flow Coal Flow kpph
Total SUM 225.6159

Run 18
Coal Flow 31 Coal Flow kpph

2/9/2010 6:18	51.17
2/9/2010 6:19	51.16
2/9/2010 6:20	51.15
2/9/2010 6:21	51.14
2/9/2010 6:22	51.14
2/9/2010 6:23	51.44
2/9/2010 6:24	51.21
2/9/2010 6:25	51.79
2/9/2010 6:26	51.51
2/9/2010 6:27	51.76
2/9/2010 6:28	51.75
2/9/2010 6:29	51.74
2/9/2010 6:30	51.75
2/9/2010 6:31	52
2/9/2010 6:32	52.02
2/9/2010 6:33	52.03
2/9/2010 6:34	51.74
2/9/2010 6:35	51.48
2/9/2010 6:36	51.72
2/9/2010 6:37	51.47
2/9/2010 6:38	51.72
2/9/2010 6:39	51.74
2/9/2010 6:40	51.76
2/9/2010 6:41	51.76
2/9/2010 6:42	51.51
2/9/2010 6:43	51.79
2/9/2010 6:44	51.81
2/9/2010 6:45	52.13
2/9/2010 6:46	52.12
2/9/2010 6:47	51.79
2/9/2010 6:48	51.78
2/9/2010 6:49	51.51
2/9/2010 6:50	51.81
2/9/2010 6:51	51.83
2/9/2010 6:52	51.85
2/9/2010 6:53	52.1
2/9/2010 6:54	52.06
2/9/2010 6:55	52.02
2/9/2010 6:56	51.71
2/9/2010 6:57	51.96
2/9/2010 6:58	51.67
2/9/2010 6:59	51.65
2/9/2010 7:00	51.62
2/9/2010 7:01	51.37
2/9/2010 7:02	51.49
2/9/2010 7:03	52.02
2/9/2010 7:04	51.76
2/9/2010 7:05	51.76
2/9/2010 7:06	51.79
2/9/2010 7:07	52.3
2/9/2010 7:08	52.15
2/9/2010 7:09	52.03
2/9/2010 7:10	52.29
2/9/2010 7:11	52.18
2/9/2010 7:12	52.08
2/9/2010 7:13	52.08
2/9/2010 7:14	52.08
2/9/2010 7:15	52.06
2/9/2010 7:16	51.67
2/9/2010 7:17	51.32
2/9/2010 7:18	51.61

Average 51.75262

Run 19
Coal Flow 31 Coal Flow kpph

2/9/2010 8:05	51.81
2/9/2010 8:06	51.83
2/9/2010 8:07	52.1
2/9/2010 8:08	52.09
2/9/2010 8:09	51.77
2/9/2010 8:10	51.49
2/9/2010 8:11	51.76
2/9/2010 8:12	51.77
2/9/2010 8:13	51.78
2/9/2010 8:14	51.79
2/9/2010 8:15	51.8
2/9/2010 8:16	51.82
2/9/2010 8:17	52.06
2/9/2010 8:18	52.06
2/9/2010 8:19	52.07
2/9/2010 8:20	52.31
2/9/2010 8:21	52.02
2/9/2010 8:22	52.3
2/9/2010 8:23	52.06
2/9/2010 8:24	52.05
2/9/2010 8:25	52.05
2/9/2010 8:26	52.03
2/9/2010 8:27	51.81
2/9/2010 8:28	52.1
2/9/2010 8:29	52.37
2/9/2010 8:30	52.09
2/9/2010 8:31	51.84
2/9/2010 8:32	52.12
2/9/2010 8:33	52.14
2/9/2010 8:34	52.16
2/9/2010 8:35	52.18
2/9/2010 8:36	52.23
2/9/2010 8:37	52.56
2/9/2010 8:38	52.05
2/9/2010 8:39	52.18
2/9/2010 8:40	52.32
2/9/2010 8:41	52.46
2/9/2010 8:42	52.57
2/9/2010 8:43	52.38
2/9/2010 8:44	52.19
2/9/2010 8:45	52.01
2/9/2010 8:46	52.02
2/9/2010 8:47	52.02
2/9/2010 8:48	52.02
2/9/2010 8:49	52.01
2/9/2010 8:50	51.83
2/9/2010 8:51	51.67
2/9/2010 8:52	51.95
2/9/2010 8:53	51.95
2/9/2010 8:54	51.95
2/9/2010 8:55	51.96
2/9/2010 8:56	51.96
2/9/2010 8:57	51.96
2/9/2010 8:58	51.96
2/9/2010 8:59	51.97
2/9/2010 9:00	52
2/9/2010 9:01	52.5
2/9/2010 9:02	52.17
2/9/2010 9:03	51.87
2/9/2010 9:04	52.14
2/9/2010 9:05	52.39

Average 52.04721

Run 20
Coal Flow 31 Coal Flow kpph

2/9/2010 9:55	52.21
2/9/2010 9:56	52.17
2/9/2010 9:57	51.92
2/9/2010 9:58	51.94
2/9/2010 9:59	51.98
2/9/2010 10:00	52.32
2/9/2010 10:01	52.62
2/9/2010 10:02	52.31
2/9/2010 10:03	52.38
2/9/2010 10:04	52.13
2/9/2010 10:05	52.36
2/9/2010 10:06	52.13
2/9/2010 10:07	52.15
2/9/2010 10:08	52.4
2/9/2010 10:09	52.23
2/9/2010 10:10	52.06
2/9/2010 10:11	51.8
2/9/2010 10:12	51.83
2/9/2010 10:13	51.87
2/9/2010 10:14	52.01
2/9/2010 10:15	52.14
2/9/2010 10:16	52.13
2/9/2010 10:17	52.14
2/9/2010 10:18	52.39
2/9/2010 10:19	52.1
2/9/2010 10:20	52.35
2/9/2010 10:21	52.33
2/9/2010 10:22	52.07
2/9/2010 10:23	51.85
2/9/2010 10:24	52.11
2/9/2010 10:25	52.11
2/9/2010 10:26	52.11
2/9/2010 10:27	52.1
2/9/2010 10:28	52.1
2/9/2010 10:29	52.1
2/9/2010 10:30	52.09
2/9/2010 10:31	52.08
2/9/2010 10:32	51.86
2/9/2010 10:33	52.14
2/9/2010 10:34	52.41
2/9/2010 10:35	52.43
2/9/2010 10:36	52.7
2/9/2010 10:37	52.36
2/9/2010 10:38	52.5
2/9/2010 10:39	52.61
2/9/2010 10:40	52.34
2/9/2010 10:41	52.34
2/9/2010 10:42	52.34
2/9/2010 10:43	52.3
2/9/2010 10:44	51.81
2/9/2010 10:45	52.09
2/9/2010 10:46	52.33
2/9/2010 10:47	52.14
2/9/2010 10:48	52.39
2/9/2010 10:49	52.4
2/9/2010 10:50	52.66
2/9/2010 10:51	52.64
2/9/2010 10:52	52.41
2/9/2010 10:53	52.47
2/9/2010 10:54	52.53
2/9/2010 10:55	52.61

Average 52.22836

Run 21
Coal Flow 31 Coal Flow kpph

2/9/2010 11:40	52.55
2/9/2010 11:41	52.41
2/9/2010 11:42	52.28
2/9/2010 11:43	52.3
2/9/2010 11:44	52.53
2/9/2010 11:45	52.31
2/9/2010 11:46	52.11
2/9/2010 11:47	52.13
2/9/2010 11:48	52.44
2/9/2010 11:49	52.44
2/9/2010 11:50	52.47
2/9/2010 11:51	52.71
2/9/2010 11:52	52.71
2/9/2010 11:53	52.69
2/9/2010 11:54	52.42
2/9/2010 11:55	52.66
2/9/2010 11:56	52.7
2/9/2010 11:57	53.23
2/9/2010 11:58	52.89
2/9/2010 11:59	52.92
2/9/2010 12:00	52.95
2/9/2010 12:01	52.99
2/9/2010 12:02	52.99
2/9/2010 12:03	52.71
2/9/2010 12:04	52.98
2/9/2010 12:05	52.97
2/9/2010 12:06	52.94
2/9/2010 12:07	52.68
2/9/2010 12:08	52.92
2/9/2010 12:09	52.64
2/9/2010 12:10	52.65
2/9/2010 12:11	52.67
2/9/2010 12:12	52.71
2/9/2010 12:13	53.01
2/9/2010 12:14	52.22
2/9/2010 12:15	52.53
2/9/2010 12:16	52.68
2/9/2010 12:17	52.79
2/9/2010 12:18	52.49
2/9/2010 12:19	52.52
2/9/2010 12:20	52.53
2/9/2010 12:21	52.32
2/9/2010 12:22	52.59
2/9/2010 12:23	52.6
2/9/2010 12:24	52.84
2/9/2010 12:25	52.86
2/9/2010 12:26	53.1
2/9/2010 12:27	52.82
2/9/2010 12:28	52.27
2/9/2010 12:29	52.53
2/9/2010 12:30	52.29
2/9/2010 12:31	52.55
2/9/2010 12:32	52.79
2/9/2010 12:33	52.81
2/9/2010 12:34	52.85
2/9/2010 12:35	53.14
2/9/2010 12:36	52.86
2/9/2010 12:37	52.59
2/9/2010 12:38	52.33
2/9/2010 12:39	52.34
2/9/2010 12:40	52.37

Average 52.64459

Run 22
Coal Flow 31 Coal Flow kpph

2/9/2010 13:25	52.67
2/9/2010 13:26	52.64
2/9/2010 13:27	52.39
2/9/2010 13:28	52.65
2/9/2010 13:29	52.67
2/9/2010 13:30	52.92
2/9/2010 13:31	52.92
2/9/2010 13:32	52.9
2/9/2010 13:33	52.58
2/9/2010 13:34	52.79
2/9/2010 13:35	52.44
2/9/2010 13:36	52.75
2/9/2010 13:37	52.75
2/9/2010 13:38	52.75
2/9/2010 13:39	52.73
2/9/2010 13:40	52.45
2/9/2010 13:41	52.48
2/9/2010 13:42	52.48
2/9/2010 13:43	52.17
2/9/2010 13:44	52.21
2/9/2010 13:45	52.65
2/9/2010 13:46	52.37
2/9/2010 13:47	52.39
2/9/2010 13:48	52.64
2/9/2010 13:49	52.64
2/9/2010 13:50	52.66
2/9/2010 13:51	52.89
2/9/2010 13:52	52.86
2/9/2010 13:53	52.54
2/9/2010 13:54	52.56
2/9/2010 13:55	52.85
2/9/2010 13:56	53.09
2/9/2010 13:57	52.8
2/9/2010 13:58	52.53
2/9/2010 13:59	52.53
2/9/2010 14:00	52.54
2/9/2010 14:01	52.75
2/9/2010 14:02	52.93
2/9/2010 14:03	52.88
2/9/2010 14:04	52.82
2/9/2010 14:05	52.76
2/9/2010 14:06	52.59
2/9/2010 14:07	52.45
2/9/2010 14:08	52.69
2/9/2010 14:09	52.62
2/9/2010 14:10	52.57
2/9/2010 14:11	52.84
2/9/2010 14:12	52.82
2/9/2010 14:13	52.58
2/9/2010 14:14	52.81
2/9/2010 14:15	52.55
2/9/2010 14:16	52.57
2/9/2010 14:17	52.82
2/9/2010 14:18	52.58
2/9/2010 14:19	52.59
2/9/2010 14:20	52.59
2/9/2010 14:21	52.59
2/9/2010 14:22	52.62
2/9/2010 14:23	52.86
2/9/2010 14:24	52.61
2/9/2010 14:25	52.62

Average 52.65557

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/9/2010 6:18	56.13	2/9/2010 8:05	56.76	2/9/2010 9:55	57.21	2/9/2010 11:40	57.36	2/9/2010 13:25	57.39
2/9/2010 6:19	56.14	2/9/2010 8:06	56.76	2/9/2010 9:56	57.15	2/9/2010 11:41	57.39	2/9/2010 13:26	57.38
2/9/2010 6:20	55.89	2/9/2010 8:07	56.77	2/9/2010 9:57	57.09	2/9/2010 11:42	57.57	2/9/2010 13:27	57.25
2/9/2010 6:21	56.07	2/9/2010 8:08	57.08	2/9/2010 9:58	57.02	2/9/2010 11:43	57.2	2/9/2010 13:28	57.52
2/9/2010 6:22	56.25	2/9/2010 8:09	56.73	2/9/2010 9:59	56.83	2/9/2010 11:44	57.27	2/9/2010 13:29	57.77
2/9/2010 6:23	56.42	2/9/2010 8:10	56.67	2/9/2010 10:00	57.36	2/9/2010 11:45	57.33	2/9/2010 13:30	57.82
2/9/2010 6:24	56.31	2/9/2010 8:11	56.62	2/9/2010 10:01	57.58	2/9/2010 11:46	57.26	2/9/2010 13:31	57.88
2/9/2010 6:25	56.57	2/9/2010 8:12	56.79	2/9/2010 10:02	57.33	2/9/2010 11:47	57.23	2/9/2010 13:32	57.97
2/9/2010 6:26	56.58	2/9/2010 8:13	56.95	2/9/2010 10:03	57.49	2/9/2010 11:48	57.61	2/9/2010 13:33	57.57
2/9/2010 6:27	56.58	2/9/2010 8:14	56.91	2/9/2010 10:04	57.41	2/9/2010 11:49	57.52	2/9/2010 13:34	57.96
2/9/2010 6:28	56.59	2/9/2010 8:15	56.52	2/9/2010 10:05	57.32	2/9/2010 11:50	57.16	2/9/2010 13:35	57.53
2/9/2010 6:29	56.59	2/9/2010 8:16	56.68	2/9/2010 10:06	57.02	2/9/2010 11:51	57.72	2/9/2010 13:36	57.66
2/9/2010 6:30	56.65	2/9/2010 8:17	57.1	2/9/2010 10:07	57.17	2/9/2010 11:52	57.9	2/9/2010 13:37	57.76
2/9/2010 6:31	57.23	2/9/2010 8:18	56.99	2/9/2010 10:08	57.32	2/9/2010 11:53	57.73	2/9/2010 13:38	57.65
2/9/2010 6:32	57.2	2/9/2010 8:19	57.26	2/9/2010 10:09	57.45	2/9/2010 11:54	57.58	2/9/2010 13:39	57.92
2/9/2010 6:33	56.7	2/9/2010 8:20	56.91	2/9/2010 10:10	57.23	2/9/2010 11:55	57.73	2/9/2010 13:40	57.42
2/9/2010 6:34	56.49	2/9/2010 8:21	57.08	2/9/2010 10:11	57.02	2/9/2010 11:56	57.88	2/9/2010 13:41	57.43
2/9/2010 6:35	56.31	2/9/2010 8:22	57.22	2/9/2010 10:12	56.82	2/9/2010 11:57	58.01	2/9/2010 13:42	57.43
2/9/2010 6:36	56.59	2/9/2010 8:23	56.99	2/9/2010 10:13	56.88	2/9/2010 11:58	57.92	2/9/2010 13:43	57.34
2/9/2010 6:37	56.56	2/9/2010 8:24	56.58	2/9/2010 10:14	57.35	2/9/2010 11:59	57.84	2/9/2010 13:44	57.28
2/9/2010 6:38	56.72	2/9/2010 8:25	57.28	2/9/2010 10:15	57.38	2/9/2010 12:00	57.78	2/9/2010 13:45	57.53
2/9/2010 6:39	56.86	2/9/2010 8:26	57.14	2/9/2010 10:16	56.99	2/9/2010 12:01	57.95	2/9/2010 13:46	57.29
2/9/2010 6:40	56.68	2/9/2010 8:27	57.02	2/9/2010 10:17	57.14	2/9/2010 12:02	58.07	2/9/2010 13:47	57.32
2/9/2010 6:41	56.49	2/9/2010 8:28	57.19	2/9/2010 10:18	57.26	2/9/2010 12:03	57.67	2/9/2010 13:48	57.75
2/9/2010 6:42	56.34	2/9/2010 8:29	57.32	2/9/2010 10:19	56.96	2/9/2010 12:04	58.06	2/9/2010 13:49	57.62
2/9/2010 6:43	56.81	2/9/2010 8:30	56.84	2/9/2010 10:20	57.2	2/9/2010 12:05	58.09	2/9/2010 13:50	57.83
2/9/2010 6:44	57.01	2/9/2010 8:31	56.74	2/9/2010 10:21	57.07	2/9/2010 12:06	57.83	2/9/2010 13:51	57.72
2/9/2010 6:45	57.21	2/9/2010 8:32	57.02	2/9/2010 10:22	56.93	2/9/2010 12:07	57.92	2/9/2010 13:52	57.82
2/9/2010 6:46	57.14	2/9/2010 8:33	57.27	2/9/2010 10:23	56.67	2/9/2010 12:08	57.97	2/9/2010 13:53	57.58
2/9/2010 6:47	56.69	2/9/2010 8:34	57.04	2/9/2010 10:24	57.24	2/9/2010 12:09	57.61	2/9/2010 13:54	57.37
2/9/2010 6:48	56.73	2/9/2010 8:35	57.19	2/9/2010 10:25	57.22	2/9/2010 12:10	57.75	2/9/2010 13:55	57.57
2/9/2010 6:49	56.78	2/9/2010 8:36	57.34	2/9/2010 10:26	57.2	2/9/2010 12:11	57.88	2/9/2010 13:56	57.74
2/9/2010 6:50	56.83	2/9/2010 8:37	57.46	2/9/2010 10:27	57.18	2/9/2010 12:12	57.8	2/9/2010 13:57	57.63
2/9/2010 6:51	56.95	2/9/2010 8:38	57.01	2/9/2010 10:28	57.12	2/9/2010 12:13	58.11	2/9/2010 13:58	57.78
2/9/2010 6:52	57.06	2/9/2010 8:39	57.07	2/9/2010 10:29	57.06	2/9/2010 12:14	57.25	2/9/2010 13:59	57.62
2/9/2010 6:53	56.98	2/9/2010 8:40	57.48	2/9/2010 10:30	57	2/9/2010 12:15	57.76	2/9/2010 14:00	57.51
2/9/2010 6:54	56.91	2/9/2010 8:41	57.52	2/9/2010 10:31	56.93	2/9/2010 12:16	57.62	2/9/2010 14:01	57.9
2/9/2010 6:55	57.24	2/9/2010 8:42	57.55	2/9/2010 10:32	56.76	2/9/2010 12:17	57.9	2/9/2010 14:02	58.22
2/9/2010 6:56	56.56	2/9/2010 8:43	57.42	2/9/2010 10:33	57.11	2/9/2010 12:18	57.57	2/9/2010 14:03	57.81
2/9/2010 6:57	56.75	2/9/2010 8:44	57.28	2/9/2010 10:34	57.43	2/9/2010 12:19	57.29	2/9/2010 14:04	57.8
2/9/2010 6:58	56.54	2/9/2010 8:45	56.97	2/9/2010 10:35	57.39	2/9/2010 12:20	57.55	2/9/2010 14:05	57.79
2/9/2010 6:59	56.6	2/9/2010 8:46	57.24	2/9/2010 10:36	57.65	2/9/2010 12:21	57.41	2/9/2010 14:06	57.67
2/9/2010 7:00	56.38	2/9/2010 8:47	57.21	2/9/2010 10:37	57.5	2/9/2010 12:22	57.82	2/9/2010 14:07	57.57
2/9/2010 7:01	56.47	2/9/2010 8:48	57.15	2/9/2010 10:38	57.67	2/9/2010 12:23	57.58	2/9/2010 14:08	57.61
2/9/2010 7:02	56.57	2/9/2010 8:49	56.63	2/9/2010 10:39	57.59	2/9/2010 12:24	58.05	2/9/2010 14:09	57.42
2/9/2010 7:03	56.87	2/9/2010 8:50	56.65	2/9/2010 10:40	57.51	2/9/2010 12:25	57.92	2/9/2010 14:10	57.78
2/9/2010 7:04	56.89	2/9/2010 8:51	56.67	2/9/2010 10:41	57.41	2/9/2010 12:26	57.78	2/9/2010 14:11	57.86
2/9/2010 7:05	56.92	2/9/2010 8:52	56.71	2/9/2010 10:42	57.1	2/9/2010 12:27	57.62	2/9/2010 14:12	57.47
2/9/2010 7:06	56.95	2/9/2010 8:53	57.09	2/9/2010 10:43	57.13	2/9/2010 12:28	57.19	2/9/2010 14:13	57.47
2/9/2010 7:07	57.18	2/9/2010 8:54	56.88	2/9/2010 10:44	57.15	2/9/2010 12:29	57.48	2/9/2010 14:14	57.87
2/9/2010 7:08	57.16	2/9/2010 8:55	57.1	2/9/2010 10:45	57.18	2/9/2010 12:30	57.55	2/9/2010 14:15	57.71
2/9/2010 7:09	57.14	2/9/2010 8:56	56.75	2/9/2010 10:46	57.23	2/9/2010 12:31	57.61	2/9/2010 14:16	57.59
2/9/2010 7:10	57.11	2/9/2010 8:57	56.83	2/9/2010 10:47	57.08	2/9/2010 12:32	57.68	2/9/2010 14:17	57.84
2/9/2010 7:11	57.08	2/9/2010 8:58	56.91	2/9/2010 10:48	57.33	2/9/2010 12:33	57.74	2/9/2010 14:18	57.74
2/9/2010 7:12	56.88	2/9/2010 8:59	56.98	2/9/2010 10:49	57.58	2/9/2010 12:34	57.82	2/9/2010 14:19	57.64
2/9/2010 7:13	56.97	2/9/2010 9:00	57.01	2/9/2010 10:50	57.64	2/9/2010 12:35	58.12	2/9/2010 14:20	57.54
2/9/2010 7:14	56.69	2/9/2010 9:01	57.56	2/9/2010 10:51	57.68	2/9/2010 12:36	58.02	2/9/2010 14:21	57.48
2/9/2010 7:15	56.85	2/9/2010 9:02	57.11	2/9/2010 10:52	57.5	2/9/2010 12:37	57.64	2/9/2010 14:22	57.76
2/9/2010 7:16	56.48	2/9/2010 9:03	56.96	2/9/2010 10:53	57.7	2/9/2010 12:38	57.3	2/9/2010 14:23	58
2/9/2010 7:17	56.14	2/9/2010 9:04	57.12	2/9/2010 10:54	57.87	2/9/2010 12:39	57.4	2/9/2010 14:24	57.63
2/9/2010 7:18	56.45	2/9/2010 9:05	57.28	2/9/2010 10:55	57.82	2/9/2010 12:40	57.52	2/9/2010 14:25	57.6
Average	56.70344	Average	57.0223	Average	57.2559	Average	57.67033	Average	57.64557

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/9/2010 6:18	55.89	2/9/2010 8:05	56.75	2/9/2010 9:55	57.1	2/9/2010 11:40	57.67	2/9/2010 13:25	57.59
2/9/2010 6:19	56.1	2/9/2010 8:06	56.85	2/9/2010 9:56	57.09	2/9/2010 11:41	57.23	2/9/2010 13:26	57.47
2/9/2010 6:20	55.98	2/9/2010 8:07	56.95	2/9/2010 9:57	57.07	2/9/2010 11:42	57.27	2/9/2010 13:27	57.4
2/9/2010 6:21	55.88	2/9/2010 8:08	57.18	2/9/2010 9:58	56.95	2/9/2010 11:43	57.32	2/9/2010 13:28	57.9
2/9/2010 6:22	56.02	2/9/2010 8:09	56.54	2/9/2010 9:59	56.85	2/9/2010 11:44	57.36	2/9/2010 13:29	57.64
2/9/2010 6:23	56.43	2/9/2010 8:10	56.49	2/9/2010 10:00	57.27	2/9/2010 11:45	57.32	2/9/2010 13:30	58
2/9/2010 6:24	56.32	2/9/2010 8:11	56.82	2/9/2010 10:01	57.63	2/9/2010 11:46	57.3	2/9/2010 13:31	57.92
2/9/2010 6:25	56.53	2/9/2010 8:12	56.62	2/9/2010 10:02	57.22	2/9/2010 11:47	57.51	2/9/2010 13:32	57.83
2/9/2010 6:26	56.56	2/9/2010 8:13	56.77	2/9/2010 10:03	57.29	2/9/2010 11:48	57.69	2/9/2010 13:33	57.77
2/9/2010 6:27	56.6	2/9/2010 8:14	56.89	2/9/2010 10:04	57.35	2/9/2010 11:49	57.44	2/9/2010 13:34	57.87
2/9/2010 6:28	56.63	2/9/2010 8:15	56.66	2/9/2010 10:05	57.39	2/9/2010 11:50	57.25	2/9/2010 13:35	57.56
2/9/2010 6:29	56.66	2/9/2010 8:16	56.47	2/9/2010 10:06	57.09	2/9/2010 11:51	57.73	2/9/2010 13:36	57.58
2/9/2010 6:30	56.58	2/9/2010 8:17	57.04	2/9/2010 10:07	57.18	2/9/2010 11:52	57.67	2/9/2010 13:37	57.83
2/9/2010 6:31	57	2/9/2010 8:18	56.81	2/9/2010 10:08	57.27	2/9/2010 11:53	57.6	2/9/2010 13:38	57.6
2/9/2010 6:32	56.95	2/9/2010 8:19	57.21	2/9/2010 10:09	57.34	2/9/2010 11:54	57.33	2/9/2010 13:39	57.81
2/9/2010 6:33	56.9	2/9/2010 8:20	57.12	2/9/2010 10:10	57.25	2/9/2010 11:55	57.75	2/9/2010 13:40	57.37
2/9/2010 6:34	56.84	2/9/2010 8:21	57.03	2/9/2010 10:11	57.15	2/9/2010 11:56	57.77	2/9/2010 13:41	57.28
2/9/2010 6:35	56.42	2/9/2010 8:22	56.96	2/9/2010 10:12	56.88	2/9/2010 11:57	58.06	2/9/2010 13:42	57.43
2/9/2010 6:36	56.43	2/9/2010 8:23	57.18	2/9/2010 10:13	56.88	2/9/2010 11:58	57.88	2/9/2010 13:43	57.33
2/9/2010 6:37	56.44	2/9/2010 8:24	56.72	2/9/2010 10:14	56.88	2/9/2010 11:59	57.72	2/9/2010 13:44	57.27
2/9/2010 6:38	56.66	2/9/2010 8:25	56.79	2/9/2010 10:15	56.89	2/9/2010 12:00	57.9	2/9/2010 13:45	57.63
2/9/2010 6:39	56.86	2/9/2010 8:26	56.88	2/9/2010 10:16	56.91	2/9/2010 12:01	58.09	2/9/2010 13:46	57.39
2/9/2010 6:40	56.72	2/9/2010 8:27	57.11	2/9/2010 10:17	57.15	2/9/2010 12:02	58.23	2/9/2010 13:47	57.47
2/9/2010 6:41	56.58	2/9/2010 8:28	57.09	2/9/2010 10:18	57.36	2/9/2010 12:03	57.77	2/9/2010 13:48	57.56
2/9/2010 6:42	56.47	2/9/2010 8:29	57.34	2/9/2010 10:19	57.07	2/9/2010 12:04	58.09	2/9/2010 13:49	57.64
2/9/2010 6:43	56.9	2/9/2010 8:30	56.97	2/9/2010 10:20	57.13	2/9/2010 12:05	58.04	2/9/2010 13:50	57.71
2/9/2010 6:44	56.75	2/9/2010 8:31	56.65	2/9/2010 10:21	57.17	2/9/2010 12:06	57.97	2/9/2010 13:51	57.54
2/9/2010 6:45	57.22	2/9/2010 8:32	57.13	2/9/2010 10:22	56.93	2/9/2010 12:07	57.6	2/9/2010 13:52	57.76
2/9/2010 6:46	57.03	2/9/2010 8:33	57.16	2/9/2010 10:23	56.52	2/9/2010 12:08	57.95	2/9/2010 13:53	57.59
2/9/2010 6:47	56.84	2/9/2010 8:34	57.19	2/9/2010 10:24	57.23	2/9/2010 12:09	57.75	2/9/2010 13:54	57.45
2/9/2010 6:48	56.65	2/9/2010 8:35	57.23	2/9/2010 10:25	57.14	2/9/2010 12:10	57.99	2/9/2010 13:55	57.66
2/9/2010 6:49	56.49	2/9/2010 8:36	57.26	2/9/2010 10:26	57.07	2/9/2010 12:11	57.84	2/9/2010 13:56	57.85
2/9/2010 6:50	56.85	2/9/2010 8:37	57.28	2/9/2010 10:27	57.27	2/9/2010 12:12	57.63	2/9/2010 13:57	57.75
2/9/2010 6:51	56.82	2/9/2010 8:38	56.99	2/9/2010 10:28	57.27	2/9/2010 12:13	57.86	2/9/2010 13:58	57.65
2/9/2010 6:52	57.02	2/9/2010 8:39	57.13	2/9/2010 10:29	57.25	2/9/2010 12:14	57.22	2/9/2010 13:59	57.58
2/9/2010 6:53	56.94	2/9/2010 8:40	57.26	2/9/2010 10:30	56.9	2/9/2010 12:15	57.69	2/9/2010 14:00	57.8
2/9/2010 6:54	57.13	2/9/2010 8:41	57.4	2/9/2010 10:31	56.99	2/9/2010 12:16	57.55	2/9/2010 14:01	57.99
2/9/2010 6:55	56.96	2/9/2010 8:42	57.52	2/9/2010 10:32	56.84	2/9/2010 12:17	57.8	2/9/2010 14:02	57.85
2/9/2010 6:56	56.79	2/9/2010 8:43	57.4	2/9/2010 10:33	57.07	2/9/2010 12:18	57.57	2/9/2010 14:03	57.73
2/9/2010 6:57	56.62	2/9/2010 8:44	57.26	2/9/2010 10:34	57.3	2/9/2010 12:19	57.37	2/9/2010 14:04	57.86
2/9/2010 6:58	56.46	2/9/2010 8:45	56.88	2/9/2010 10:35	57.32	2/9/2010 12:20	57.45	2/9/2010 14:05	57.59
2/9/2010 6:59	56.64	2/9/2010 8:46	57.1	2/9/2010 10:36	57.35	2/9/2010 12:21	57.53	2/9/2010 14:06	57.69
2/9/2010 7:00	56.8	2/9/2010 8:47	57.29	2/9/2010 10:37	57.39	2/9/2010 12:22	57.6	2/9/2010 14:07	57.79
2/9/2010 7:01	56.72	2/9/2010 8:48	57.02	2/9/2010 10:38	57.79	2/9/2010 12:23	57.52	2/9/2010 14:08	57.86
2/9/2010 7:02	56.66	2/9/2010 8:49	56.77	2/9/2010 10:39	57.78	2/9/2010 12:24	57.91	2/9/2010 14:09	57.62
2/9/2010 7:03	57.02	2/9/2010 8:50	56.83	2/9/2010 10:40	57.4	2/9/2010 12:25	57.97	2/9/2010 14:10	57.64
2/9/2010 7:04	56.87	2/9/2010 8:51	56.44	2/9/2010 10:41	57.46	2/9/2010 12:26	58	2/9/2010 14:11	57.66
2/9/2010 7:05	56.75	2/9/2010 8:52	56.92	2/9/2010 10:42	57.27	2/9/2010 12:27	57.65	2/9/2010 14:12	57.66
2/9/2010 7:06	57.22	2/9/2010 8:53	57.02	2/9/2010 10:43	57.07	2/9/2010 12:28	57.33	2/9/2010 14:13	57.42
2/9/2010 7:07	57.26	2/9/2010 8:54	57.1	2/9/2010 10:44	56.7	2/9/2010 12:29	57.55	2/9/2010 14:14	57.56
2/9/2010 7:08	57.28	2/9/2010 8:55	56.97	2/9/2010 10:45	56.98	2/9/2010 12:30	57.45	2/9/2010 14:15	57.67
2/9/2010 7:09	56.97	2/9/2010 8:56	56.84	2/9/2010 10:46	57.23	2/9/2010 12:31	57.78	2/9/2010 14:16	57.65
2/9/2010 7:10	56.98	2/9/2010 8:57	56.72	2/9/2010 10:47	57.09	2/9/2010 12:32	57.85	2/9/2010 14:17	57.93
2/9/2010 7:11	56.99	2/9/2010 8:58	56.9	2/9/2010 10:48	57.36	2/9/2010 12:33	57.67	2/9/2010 14:18	57.82
2/9/2010 7:12	57	2/9/2010 8:59	57.05	2/9/2010 10:49	57.6	2/9/2010 12:34	57.88	2/9/2010 14:19	57.7
2/9/2010 7:13	57	2/9/2010 9:00	56.95	2/9/2010 10:50	57.43	2/9/2010 12:35	58.05	2/9/2010 14:20	57.59
2/9/2010 7:14	56.86	2/9/2010 9:01	57.5	2/9/2010 10:51	57.51	2/9/2010 12:36	57.83	2/9/2010 14:21	57.5
2/9/2010 7:15	56.97	2/9/2010 9:02	57.04	2/9/2010 10:52	57.58	2/9/2010 12:37	57.6	2/9/2010 14:22	57.72
2/9/2010 7:16	56.83	2/9/2010 9:03	57.09	2/9/2010 10:53	57.66	2/9/2010 12:38	57.4	2/9/2010 14:23	57.89
2/9/2010 7:17	56.33	2/9/2010 9:04	57.15	2/9/2010 10:54	57.74	2/9/2010 12:39	57.5	2/9/2010 14:24	57.56
2/9/2010 7:18	56.57	2/9/2010 9:05	57.2	2/9/2010 10:55	57.89	2/9/2010 12:40	57.6	2/9/2010 14:25	57.88
Average	56.71213	Average	56.9977	Average	57.21623	Average	57.66721	Average	57.66082

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/9/2010 6:18	56.21	2/9/2010 8:05	56.93	2/9/2010 9:55	56.86	2/9/2010 11:40	57.4	2/9/2010 13:25	57.66
2/9/2010 6:19	56.14	2/9/2010 8:06	57.02	2/9/2010 9:56	56.85	2/9/2010 11:41	57.39	2/9/2010 13:26	57.66
2/9/2010 6:20	56.07	2/9/2010 8:07	57.1	2/9/2010 9:57	56.83	2/9/2010 11:42	57.39	2/9/2010 13:27	57.66
2/9/2010 6:21	56.11	2/9/2010 8:08	57.17	2/9/2010 9:58	56.82	2/9/2010 11:43	57.38	2/9/2010 13:28	57.66
2/9/2010 6:22	56.16	2/9/2010 8:09	57.01	2/9/2010 9:59	56.83	2/9/2010 11:44	57.37	2/9/2010 13:29	57.66
2/9/2010 6:23	56.2	2/9/2010 8:10	56.86	2/9/2010 10:00	57.25	2/9/2010 11:45	57.37	2/9/2010 13:30	57.64
2/9/2010 6:24	56.24	2/9/2010 8:11	56.71	2/9/2010 10:01	57.63	2/9/2010 11:46	57.36	2/9/2010 13:31	57.62
2/9/2010 6:25	56.29	2/9/2010 8:12	56.74	2/9/2010 10:02	57.6	2/9/2010 11:47	57.35	2/9/2010 13:32	57.6
2/9/2010 6:26	56.33	2/9/2010 8:13	56.78	2/9/2010 10:03	57.56	2/9/2010 11:48	57.35	2/9/2010 13:33	57.59
2/9/2010 6:27	56.38	2/9/2010 8:14	56.81	2/9/2010 10:04	57.53	2/9/2010 11:49	57.34	2/9/2010 13:34	57.57
2/9/2010 6:28	56.42	2/9/2010 8:15	56.84	2/9/2010 10:05	57.49	2/9/2010 11:50	57.34	2/9/2010 13:35	57.55
2/9/2010 6:29	56.47	2/9/2010 8:16	56.87	2/9/2010 10:06	57.45	2/9/2010 11:51	57.36	2/9/2010 13:36	57.53
2/9/2010 6:30	56.51	2/9/2010 8:17	56.9	2/9/2010 10:07	57.42	2/9/2010 11:52	57.37	2/9/2010 13:37	57.51
2/9/2010 6:31	56.55	2/9/2010 8:18	56.93	2/9/2010 10:08	57.38	2/9/2010 11:53	57.39	2/9/2010 13:38	57.49
2/9/2010 6:32	56.6	2/9/2010 8:19	56.96	2/9/2010 10:09	57.35	2/9/2010 11:54	57.41	2/9/2010 13:39	57.48
2/9/2010 6:33	56.64	2/9/2010 8:20	56.99	2/9/2010 10:10	57.31	2/9/2010 11:55	57.43	2/9/2010 13:40	57.46
2/9/2010 6:34	56.68	2/9/2010 8:21	57.02	2/9/2010 10:11	57.27	2/9/2010 11:56	57.45	2/9/2010 13:41	57.44
2/9/2010 6:35	56.64	2/9/2010 8:22	57.06	2/9/2010 10:12	57.24	2/9/2010 11:57	57.47	2/9/2010 13:42	57.42
2/9/2010 6:36	56.59	2/9/2010 8:23	57.06	2/9/2010 10:13	57.2	2/9/2010 11:58	57.49	2/9/2010 13:43	57.4
2/9/2010 6:37	56.55	2/9/2010 8:24	56.73	2/9/2010 10:14	57.17	2/9/2010 11:59	57.51	2/9/2010 13:44	57.38
2/9/2010 6:38	56.5	2/9/2010 8:25	57.38	2/9/2010 10:15	57.13	2/9/2010 12:00	57.53	2/9/2010 13:45	57.37
2/9/2010 6:39	56.46	2/9/2010 8:26	57.36	2/9/2010 10:16	57.09	2/9/2010 12:01	57.55	2/9/2010 13:46	57.35
2/9/2010 6:40	56.41	2/9/2010 8:27	57.34	2/9/2010 10:17	57.06	2/9/2010 12:02	57.57	2/9/2010 13:47	57.33
2/9/2010 6:41	56.37	2/9/2010 8:28	57.32	2/9/2010 10:18	57.02	2/9/2010 12:03	57.59	2/9/2010 13:48	57.38
2/9/2010 6:42	56.34	2/9/2010 8:29	57.3	2/9/2010 10:19	56.99	2/9/2010 12:04	57.61	2/9/2010 13:49	57.42
2/9/2010 6:43	56.56	2/9/2010 8:30	57.28	2/9/2010 10:20	56.99	2/9/2010 12:05	57.63	2/9/2010 13:50	57.47
2/9/2010 6:44	56.78	2/9/2010 8:31	57.26	2/9/2010 10:21	57	2/9/2010 12:06	57.65	2/9/2010 13:51	57.52
2/9/2010 6:45	57	2/9/2010 8:32	57.24	2/9/2010 10:22	57	2/9/2010 12:07	57.7	2/9/2010 13:52	57.56
2/9/2010 6:46	57.21	2/9/2010 8:33	57.22	2/9/2010 10:23	57	2/9/2010 12:08	57.75	2/9/2010 13:53	57.61
2/9/2010 6:47	57.16	2/9/2010 8:34	57.2	2/9/2010 10:24	57.01	2/9/2010 12:09	57.8	2/9/2010 13:54	57.65
2/9/2010 6:48	57.1	2/9/2010 8:35	57.18	2/9/2010 10:25	57.01	2/9/2010 12:10	57.85	2/9/2010 13:55	57.7
2/9/2010 6:49	57.04	2/9/2010 8:36	57.23	2/9/2010 10:26	57.01	2/9/2010 12:11	57.9	2/9/2010 13:56	57.74
2/9/2010 6:50	56.99	2/9/2010 8:37	57.27	2/9/2010 10:27	57.02	2/9/2010 12:12	57.95	2/9/2010 13:57	57.78
2/9/2010 6:51	56.93	2/9/2010 8:38	57.32	2/9/2010 10:28	57.02	2/9/2010 12:13	57.95	2/9/2010 13:58	57.78
2/9/2010 6:52	56.87	2/9/2010 8:39	57.36	2/9/2010 10:29	57.02	2/9/2010 12:14	57.2	2/9/2010 13:59	57.78
2/9/2010 6:53	56.82	2/9/2010 8:40	57.41	2/9/2010 10:30	57.03	2/9/2010 12:15	57.27	2/9/2010 14:00	57.78
2/9/2010 6:54	56.76	2/9/2010 8:41	57.45	2/9/2010 10:31	57.03	2/9/2010 12:16	57.34	2/9/2010 14:01	57.78
2/9/2010 6:55	56.79	2/9/2010 8:42	57.5	2/9/2010 10:32	57.03	2/9/2010 12:17	57.41	2/9/2010 14:02	57.78
2/9/2010 6:56	56.81	2/9/2010 8:43	57.53	2/9/2010 10:33	57.04	2/9/2010 12:18	57.48	2/9/2010 14:03	57.78
2/9/2010 6:57	56.83	2/9/2010 8:44	57.42	2/9/2010 10:34	57.1	2/9/2010 12:19	57.51	2/9/2010 14:04	57.78
2/9/2010 6:58	56.86	2/9/2010 8:45	57.3	2/9/2010 10:35	57.15	2/9/2010 12:20	57.54	2/9/2010 14:05	57.78
2/9/2010 6:59	56.88	2/9/2010 8:46	57.18	2/9/2010 10:36	57.21	2/9/2010 12:21	57.57	2/9/2010 14:06	57.78
2/9/2010 7:00	56.9	2/9/2010 8:47	57.06	2/9/2010 10:37	57.27	2/9/2010 12:22	57.6	2/9/2010 14:07	57.79
2/9/2010 7:01	56.92	2/9/2010 8:48	56.95	2/9/2010 10:38	57.32	2/9/2010 12:23	57.63	2/9/2010 14:08	57.79
2/9/2010 7:02	56.95	2/9/2010 8:49	56.83	2/9/2010 10:39	57.38	2/9/2010 12:24	57.66	2/9/2010 14:09	57.79
2/9/2010 7:03	56.97	2/9/2010 8:50	56.71	2/9/2010 10:40	57.44	2/9/2010 12:25	57.69	2/9/2010 14:10	57.79
2/9/2010 7:04	56.99	2/9/2010 8:51	56.6	2/9/2010 10:41	57.49	2/9/2010 12:26	57.72	2/9/2010 14:11	57.79
2/9/2010 7:05	57.02	2/9/2010 8:52	56.64	2/9/2010 10:42	57.42	2/9/2010 12:27	57.75	2/9/2010 14:12	57.79
2/9/2010 7:06	57.04	2/9/2010 8:53	56.68	2/9/2010 10:43	57.34	2/9/2010 12:28	57.72	2/9/2010 14:13	57.79
2/9/2010 7:07	57.06	2/9/2010 8:54	56.72	2/9/2010 10:44	57.27	2/9/2010 12:29	57.7	2/9/2010 14:14	57.79
2/9/2010 7:08	57.01	2/9/2010 8:55	56.75	2/9/2010 10:45	57.2	2/9/2010 12:30	57.67	2/9/2010 14:15	57.79
2/9/2010 7:09	56.96	2/9/2010 8:56	56.79	2/9/2010 10:46	57.13	2/9/2010 12:31	57.64	2/9/2010 14:16	57.79
2/9/2010 7:10	56.91	2/9/2010 8:57	56.85	2/9/2010 10:47	57.07	2/9/2010 12:32	57.62	2/9/2010 14:17	57.79
2/9/2010 7:11	56.86	2/9/2010 8:58	56.9	2/9/2010 10:48	57.15	2/9/2010 12:33	57.59	2/9/2010 14:18	57.79
2/9/2010 7:12	56.81	2/9/2010 8:59	56.95	2/9/2010 10:49	57.24	2/9/2010 12:34	57.56	2/9/2010 14:19	57.79
2/9/2010 7:13	56.76	2/9/2010 9:00	57.01	2/9/2010 10:50	57.32	2/9/2010 12:35	57.54	2/9/2010 14:20	57.79
2/9/2010 7:14	56.71	2/9/2010 9:01	57.06	2/9/2010 10:51	57.4	2/9/2010 12:36	57.51	2/9/2010 14:21	57.79
2/9/2010 7:15	56.66	2/9/2010 9:02	57.12	2/9/2010 10:52	57.48	2/9/2010 12:37	57.49	2/9/2010 14:22	57.79
2/9/2010 7:16	56.61	2/9/2010 9:03	57.11	2/9/2010 10:53	57.56	2/9/2010 12:38	57.49	2/9/2010 14:23	57.79
2/9/2010 7:17	56.57	2/9/2010 9:04	57.11	2/9/2010 10:54	57.65	2/9/2010 12:39	57.49	2/9/2010 14:24	57.79
2/9/2010 7:18	56.52	2/9/2010 9:05	57.11	2/9/2010 10:55	57.73	2/9/2010 12:40	57.49	2/9/2010 14:25	57.79
Average	56.68	Average	57.05721	Average	57.21082	Average	57.5382	Average	57.65393

Total SUM 221.8482 Total SUM 223.1244 Total SUM 223.9113 Total SUM 225.5203 Total SUM 225.6159

OPACITY - UNIT 3

Run 18	
Date/Time	MPP3 OPACITY Value

02/09/2010 06:18	4.35
02/09/2010 06:24	4.38
02/09/2010 06:30	4.36
02/09/2010 06:36	4.47
02/09/2010 06:42	4.44
02/09/2010 06:48	4.48
02/09/2010 06:54	4.51
02/09/2010 07:00	4.32
02/09/2010 07:06	4.21
02/09/2010 07:12	4.35
02/09/2010 07:18	4.72

Run 19	
Date/Time	MPP3 OPACITY Value

02/09/2010 08:00	4.67
02/09/2010 08:06	4.70
02/09/2010 08:12	4.08
02/09/2010 08:18	4.51
02/09/2010 08:24	4.43
02/09/2010 08:30	4.34
02/09/2010 08:36	4.39
02/09/2010 08:42	4.75
02/09/2010 08:48	4.68
02/09/2010 08:54	4.57
02/09/2010 09:00	4.61
02/09/2010 09:06	4.29

Run 20	
Date/Time	MPP3 OPACITY Value

02/09/2010 09:54	4.43
02/09/2010 10:00	4.21
02/09/2010 10:06	4.16
02/09/2010 10:12	4.46
02/09/2010 10:18	4.31
02/09/2010 10:24	4.19
02/09/2010 10:30	4.29
02/09/2010 10:36	4.08
02/09/2010 10:42	3.90
02/09/2010 10:48	4.01
02/09/2010 10:54	4.67
02/09/2010 11:00	4.34

Run 21	
Date/Time	MPP3 OPACITY Value

02/09/2010 11:36	4.31
02/09/2010 11:42	3.95
02/09/2010 11:48	4.02
02/09/2010 11:54	4.08
02/09/2010 12:00	4.25
02/09/2010 12:06	4.05
02/09/2010 12:12	3.92
02/09/2010 12:18	4.08
02/09/2010 12:24	4.00
02/09/2010 12:30	4.04
02/09/2010 12:36	3.92
02/09/2010 12:42	4.05

Run 22	
Date/Time	MPP3 OPACITY Value

02/09/2010 13:24	4.23
02/09/2010 13:30	4.01
02/09/2010 13:36	4.14
02/09/2010 13:42	4.41
02/09/2010 13:48	4.18
02/09/2010 13:54	4.20
02/09/2010 14:00	4.32
02/09/2010 14:06	4.27
02/09/2010 14:12	4.25
02/09/2010 14:18	4.02
02/09/2010 14:24	4.29
02/09/2010 14:30	4.20

55

February 10, 2010

NH3 slip at Stack

Date/Run	Start Time	End Time	Unit Capacity (%)	Gross Output (MW)	Heat Input (MMBtu/hr)	Ammonia Injection Rate [lb/hr]
<u>2/10/2010</u>						
Run 1	1152	1304	100	365	3631	288
Run 2	1318	1428	100	365	3644	287
Run 3	1443	1555	100	365	3656	286

Ammonia Flow into Side - 32 (North Side)

Set 1 - Run 1	
Date-Time	NH3 Injection Rate [lb/hr]
2/10/2010 11:52	148.64
2/10/2010 11:53	148.07
2/10/2010 11:54	152.69
2/10/2010 11:55	151.16
2/10/2010 11:56	149.98
2/10/2010 11:57	148.46
2/10/2010 11:58	148.87
2/10/2010 11:59	146.12
2/10/2010 12:00	146.75
2/10/2010 12:01	149.45
2/10/2010 12:02	149.88
2/10/2010 12:03	151.74
2/10/2010 12:04	149.31
2/10/2010 12:05	147.94
2/10/2010 12:06	148.59
2/10/2010 12:07	149.57
2/10/2010 12:08	149.79
2/10/2010 12:09	151.65
2/10/2010 12:10	157.14
2/10/2010 12:11	160
2/10/2010 12:12	160.4
2/10/2010 12:13	154.6
2/10/2010 12:14	150.22
2/10/2010 12:15	146.13
2/10/2010 12:16	146.19
2/10/2010 12:17	146.48
2/10/2010 12:18	153.65
2/10/2010 12:19	155.37
2/10/2010 12:20	154.48
2/10/2010 12:21	153.64
2/10/2010 12:22	148.86
2/10/2010 12:23	147.58
2/10/2010 12:24	151.24
2/10/2010 12:25	153.64
2/10/2010 12:26	153.19
2/10/2010 12:27	150.18
2/10/2010 12:28	148.23
2/10/2010 12:29	146.14
2/10/2010 12:30	144.1
2/10/2010 12:31	149.28
2/10/2010 12:32	154.81
2/10/2010 12:33	156.18
2/10/2010 12:34	155.4
2/10/2010 12:35	155.58
2/10/2010 12:36	156.89
2/10/2010 12:37	156.9
2/10/2010 12:38	147.75
2/10/2010 12:39	140.92
2/10/2010 12:40	141.51
2/10/2010 12:41	145.5
2/10/2010 12:42	152.9
2/10/2010 12:43	156.66
2/10/2010 12:44	157.8
2/10/2010 12:45	152.57
2/10/2010 12:46	149.71
2/10/2010 12:47	145.87
2/10/2010 12:48	153.12
2/10/2010 12:49	156.56
2/10/2010 12:50	156.46
2/10/2010 12:51	157.34
2/10/2010 12:52	153.39
2/10/2010 12:53	146.85
2/10/2010 12:54	144.78
2/10/2010 12:55	144.61
2/10/2010 12:56	145.79
2/10/2010 12:57	151.35
2/10/2010 12:58	156.56
2/10/2010 12:59	156.56
2/10/2010 13:00	152.24
2/10/2010 13:01	150.15
2/10/2010 13:02	148.21
2/10/2010 13:03	152.56
2/10/2010 13:04	155.56

Average 151.0745205

Run 1
Sum 288.2009589

Set 1 - Run 2	
Date-Time	NH3 Injection Rate [lb/hr]
2/10/2010 13:18	157.23
2/10/2010 13:19	157.22
2/10/2010 13:20	152.17
2/10/2010 13:21	147.7
2/10/2010 13:22	148.68
2/10/2010 13:23	152.84
2/10/2010 13:24	148.67
2/10/2010 13:25	146.63
2/10/2010 13:26	145.44
2/10/2010 13:27	142.88
2/10/2010 13:28	141.73
2/10/2010 13:29	143.13
2/10/2010 13:30	144.71
2/10/2010 13:31	147.59
2/10/2010 13:32	147.6
2/10/2010 13:33	153.41
2/10/2010 13:34	152.1
2/10/2010 13:35	147.6
2/10/2010 13:36	148.81
2/10/2010 13:37	148.26
2/10/2010 13:38	146.5
2/10/2010 13:39	147.19
2/10/2010 13:40	152.18
2/10/2010 13:41	155.18
2/10/2010 13:42	154.7
2/10/2010 13:43	154.54
2/10/2010 13:44	156.79
2/10/2010 13:45	158.49
2/10/2010 13:46	157.03
2/10/2010 13:47	154.69
2/10/2010 13:48	154.11
2/10/2010 13:49	151.74
2/10/2010 13:50	151.98
2/10/2010 13:51	153.26
2/10/2010 13:52	152.92
2/10/2010 13:53	152.08
2/10/2010 13:54	149.33
2/10/2010 13:55	144.69
2/10/2010 13:56	143.22
2/10/2010 13:57	150.03
2/10/2010 13:58	152.5
2/10/2010 13:59	154.29
2/10/2010 14:00	150.66
2/10/2010 14:01	146.01
2/10/2010 14:02	144.81
2/10/2010 14:03	151.97
2/10/2010 14:04	154.32
2/10/2010 14:05	155.22
2/10/2010 14:06	146.22
2/10/2010 14:07	146.55
2/10/2010 14:08	144.41
2/10/2010 14:09	141.58
2/10/2010 14:10	138.1
2/10/2010 14:11	144.41
2/10/2010 14:12	151.57
2/10/2010 14:13	152.16
2/10/2010 14:14	151.59
2/10/2010 14:15	151.14
2/10/2010 14:16	152.53
2/10/2010 14:17	150.08
2/10/2010 14:18	149.65
2/10/2010 14:19	149.35
2/10/2010 14:20	149.55
2/10/2010 14:21	151.69
2/10/2010 14:22	150.79
2/10/2010 14:23	150.21
2/10/2010 14:24	151.33
2/10/2010 14:25	151.01
2/10/2010 14:26	152.35
2/10/2010 14:27	153.84
2/10/2010 14:28	151.24

Average 150.0870423

Run 2 3
Sum 286.9988732 285.8928767

Set 1 - Run 3	
Date-Time	NH3 Injection Rate [lb/hr]
2/10/2010 14:43	148.18
2/10/2010 14:44	150.07
2/10/2010 14:45	148.06
2/10/2010 14:46	149.4
2/10/2010 14:47	148.92
2/10/2010 14:48	147.82
2/10/2010 14:49	148.7
2/10/2010 14:50	150.45
2/10/2010 14:51	148.98
2/10/2010 14:52	145.33
2/10/2010 14:53	143.47
2/10/2010 14:54	141.59
2/10/2010 14:55	144.62
2/10/2010 14:56	145.75
2/10/2010 14:57	146.27
2/10/2010 14:58	146.9
2/10/2010 14:59	142.22
2/10/2010 15:00	143.38
2/10/2010 15:01	143.31
2/10/2010 15:02	142.72
2/10/2010 15:03	151.05
2/10/2010 15:04	151.16
2/10/2010 15:05	151.06
2/10/2010 15:06	148.93
2/10/2010 15:07	147.56
2/10/2010 15:08	149.53
2/10/2010 15:09	144.12
2/10/2010 15:10	146.94
2/10/2010 15:11	142.67
2/10/2010 15:12	146.45
2/10/2010 15:13	148.64
2/10/2010 15:14	151.24
2/10/2010 15:15	154.64
2/10/2010 15:16	151.71
2/10/2010 15:17	151.41
2/10/2010 15:18	158.16
2/10/2010 15:19	154.87
2/10/2010 15:20	150.26
2/10/2010 15:21	149.29
2/10/2010 15:22	144.38
2/10/2010 15:23	143.6
2/10/2010 15:24	149.98
2/10/2010 15:25	153.8
2/10/2010 15:26	148.92
2/10/2010 15:27	149.09
2/10/2010 15:28	149.61
2/10/2010 15:29	145.61
2/10/2010 15:30	145.61
2/10/2010 15:31	148.38
2/10/2010 15:32	145.3
2/10/2010 15:33	151.48
2/10/2010 15:34	147.77
2/10/2010 15:35	150.59
2/10/2010 15:36	153.5
2/10/2010 15:37	153
2/10/2010 15:38	149.28
2/10/2010 15:39	156.59
2/10/2010 15:40	155.14
2/10/2010 15:41	152.68
2/10/2010 15:42	150.31
2/10/2010 15:43	150.23
2/10/2010 15:44	151.2
2/10/2010 15:45	153.93
2/10/2010 15:46	150.14
2/10/2010 15:47	151.29
2/10/2010 15:48	156.17
2/10/2010 15:49	156.34
2/10/2010 15:50	154.05
2/10/2010 15:51	151.52
2/10/2010 15:52	149.33
2/10/2010 15:53	154.33
2/10/2010 15:54	154.37
2/10/2010 15:55	150.41

Average 149.3665753

Run 3
Sum 288.2009589

Ammonia Flow into Side - 31 (North Side)

Set 1 - Run 1	
Date-Time	NH ₃ Injection
2/10/2010 11:52	135.16
2/10/2010 11:53	134.25
2/10/2010 11:54	134.56
2/10/2010 11:55	135.87
2/10/2010 11:56	137.32
2/10/2010 11:57	139.82
2/10/2010 11:58	138.28
2/10/2010 11:59	135.1
2/10/2010 12:00	138.7
2/10/2010 12:01	139.11
2/10/2010 12:02	141
2/10/2010 12:03	140.43
2/10/2010 12:04	137.27
2/10/2010 12:05	135.4
2/10/2010 12:06	137.82
2/10/2010 12:07	140.56
2/10/2010 12:08	140.13
2/10/2010 12:09	142.69
2/10/2010 12:10	143.63
2/10/2010 12:11	136.83
2/10/2010 12:12	135.24
2/10/2010 12:13	136.14
2/10/2010 12:14	136.92
2/10/2010 12:15	135.05
2/10/2010 12:16	133.25
2/10/2010 12:17	131.01
2/10/2010 12:18	135.77
2/10/2010 12:19	139.11
2/10/2010 12:20	138.26
2/10/2010 12:21	137.48
2/10/2010 12:22	135.29
2/10/2010 12:23	138
2/10/2010 12:24	140.13
2/10/2010 12:25	139.84
2/10/2010 12:26	139.16
2/10/2010 12:27	138.79
2/10/2010 12:28	138.19
2/10/2010 12:29	136.52
2/10/2010 12:30	135.79
2/10/2010 12:31	135.24
2/10/2010 12:32	137.12
2/10/2010 12:33	139.48
2/10/2010 12:34	138.01
2/10/2010 12:35	136.81
2/10/2010 12:36	137.09
2/10/2010 12:37	136.07
2/10/2010 12:38	136.21
2/10/2010 12:39	134.36
2/10/2010 12:40	132.9
2/10/2010 12:41	136.08
2/10/2010 12:42	136.43
2/10/2010 12:43	134.21
2/10/2010 12:44	137.77
2/10/2010 12:45	139.91
2/10/2010 12:46	138.25
2/10/2010 12:47	135.69
2/10/2010 12:48	133.32
2/10/2010 12:49	137.64
2/10/2010 12:50	139.63
2/10/2010 12:51	135.82
2/10/2010 12:52	137.33
2/10/2010 12:53	137.73
2/10/2010 12:54	136.51
2/10/2010 12:55	135.04
2/10/2010 12:56	132.26
2/10/2010 12:57	136.99
2/10/2010 12:58	137.84
2/10/2010 12:59	135.81
2/10/2010 13:00	139.54
2/10/2010 13:01	140.81
2/10/2010 13:02	139.55
2/10/2010 13:03	136.52
2/10/2010 13:04	132.39

Average 137.1264

Set 1 - Run 2	
Date-Time	NH ₃ Injection
2/10/2010 13:18	137.1
2/10/2010 13:19	135.99
2/10/2010 13:20	133.96
2/10/2010 13:21	134.12
2/10/2010 13:22	136.59
2/10/2010 13:23	140.46
2/10/2010 13:24	139.47
2/10/2010 13:25	139.17
2/10/2010 13:26	138.7
2/10/2010 13:27	136.05
2/10/2010 13:28	136.5
2/10/2010 13:29	135.41
2/10/2010 13:30	131.98
2/10/2010 13:31	133.58
2/10/2010 13:32	136.45
2/10/2010 13:33	140.05
2/10/2010 13:34	138.67
2/10/2010 13:35	137.78
2/10/2010 13:36	132.6
2/10/2010 13:37	135.76
2/10/2010 13:38	134.9
2/10/2010 13:39	138.1
2/10/2010 13:40	137.8
2/10/2010 13:41	135.66
2/10/2010 13:42	140.3
2/10/2010 13:43	134.73
2/10/2010 13:44	139.67
2/10/2010 13:45	137.92
2/10/2010 13:46	137.45
2/10/2010 13:47	139.29
2/10/2010 13:48	138.84
2/10/2010 13:49	137.81
2/10/2010 13:50	136.86
2/10/2010 13:51	138.84
2/10/2010 13:52	137.25
2/10/2010 13:53	138.16
2/10/2010 13:54	138.01
2/10/2010 13:55	138.57
2/10/2010 13:56	138.85
2/10/2010 13:57	132.47
2/10/2010 13:58	136.28
2/10/2010 13:59	135.38
2/10/2010 14:00	138.21
2/10/2010 14:01	139.75
2/10/2010 14:02	142.12
2/10/2010 14:03	128.59
2/10/2010 14:04	132.96
2/10/2010 14:05	138.74
2/10/2010 14:06	141.56
2/10/2010 14:07	141.36
2/10/2010 14:08	136.17
2/10/2010 14:09	135.07
2/10/2010 14:10	137.27
2/10/2010 14:11	134.94
2/10/2010 14:12	130.56
2/10/2010 14:13	133.55
2/10/2010 14:14	136.82
2/10/2010 14:15	134.79
2/10/2010 14:16	136.24
2/10/2010 14:17	139.72
2/10/2010 14:18	137.53
2/10/2010 14:19	136.86
2/10/2010 14:20	136.21
2/10/2010 14:21	137.1
2/10/2010 14:22	138.02
2/10/2010 14:23	138.47
2/10/2010 14:24	134.41
2/10/2010 14:25	138.99
2/10/2010 14:26	140.83
2/10/2010 14:27	134.89
2/10/2010 14:28	135.48

Average 136.9118

Set 1 - Run 3	
Date-Time	NH ₃ Injection
2/10/2010 14:43	134.07
2/10/2010 14:44	135.7
2/10/2010 14:45	134.91
2/10/2010 14:46	133.97
2/10/2010 14:47	136.4
2/10/2010 14:48	132.67
2/10/2010 14:49	134.65
2/10/2010 14:50	134.98
2/10/2010 14:51	137.45
2/10/2010 14:52	135.7
2/10/2010 14:53	138.33
2/10/2010 14:54	138.93
2/10/2010 14:55	138.44
2/10/2010 14:56	137.85
2/10/2010 14:57	138.85
2/10/2010 14:58	138.59
2/10/2010 14:59	138
2/10/2010 15:00	141.56
2/10/2010 15:01	143.14
2/10/2010 15:02	139.77
2/10/2010 15:03	133.71
2/10/2010 15:04	133.75
2/10/2010 15:05	135.06
2/10/2010 15:06	135.99
2/10/2010 15:07	138.31
2/10/2010 15:08	138.36
2/10/2010 15:09	137.1
2/10/2010 15:10	136.52
2/10/2010 15:11	131.93
2/10/2010 15:12	140.8
2/10/2010 15:13	138.22
2/10/2010 15:14	138.85
2/10/2010 15:15	131.45
2/10/2010 15:16	131.07
2/10/2010 15:17	133.88
2/10/2010 15:18	142.87
2/10/2010 15:19	141.94
2/10/2010 15:20	135.84
2/10/2010 15:21	133.71
2/10/2010 15:22	133.41
2/10/2010 15:23	132.15
2/10/2010 15:24	137.97
2/10/2010 15:25	132.84
2/10/2010 15:26	134.01
2/10/2010 15:27	135.62
2/10/2010 15:28	139.21
2/10/2010 15:29	132.37
2/10/2010 15:30	139.02
2/10/2010 15:31	138.03
2/10/2010 15:32	139.89
2/10/2010 15:33	137.68
2/10/2010 15:34	131.8
2/10/2010 15:35	134.39
2/10/2010 15:36	138.36
2/10/2010 15:37	140.4
2/10/2010 15:38	134.03
2/10/2010 15:39	134.9
2/10/2010 15:40	137.04
2/10/2010 15:41	140.08
2/10/2010 15:42	135.61
2/10/2010 15:43	131.71
2/10/2010 15:44	135.19
2/10/2010 15:45	136.01
2/10/2010 15:46	135.21
2/10/2010 15:47	140.13
2/10/2010 15:48	134.47
2/10/2010 15:49	135.19
2/10/2010 15:50	139.34
2/10/2010 15:51	140.71
2/10/2010 15:52	138.13
2/10/2010 15:53	137.41
2/10/2010 15:54	136.41
2/10/2010 15:55	134.38

Average 136.5263

Set 1 - Run 1

Coal Flow 31	Coal Flow kpph
2/10/2010 11:52	71.6
2/10/2010 11:53	71.35
2/10/2010 11:54	71.1
2/10/2010 11:55	71
2/10/2010 11:56	70.9
2/10/2010 11:57	71.07
2/10/2010 11:58	71.15
2/10/2010 11:59	71.11
2/10/2010 12:00	71.3
2/10/2010 12:01	71.38
2/10/2010 12:02	71.34
2/10/2010 12:03	71.29
2/10/2010 12:04	71.25
2/10/2010 12:05	71.21
2/10/2010 12:06	70.99
2/10/2010 12:07	70.88
2/10/2010 12:08	70.67
2/10/2010 12:09	71.03
2/10/2010 12:10	71.37
2/10/2010 12:11	71.21
2/10/2010 12:12	70.89
2/10/2010 12:13	70.98
2/10/2010 12:14	71.07
2/10/2010 12:15	71.05
2/10/2010 12:16	71.03
2/10/2010 12:17	71.01
2/10/2010 12:18	71.03
2/10/2010 12:19	71.06
2/10/2010 12:20	71.09
2/10/2010 12:21	71.29
2/10/2010 12:22	71.35
2/10/2010 12:23	71.31
2/10/2010 12:24	71.08
2/10/2010 12:25	71.07
2/10/2010 12:26	71.21
2/10/2010 12:27	71.15
2/10/2010 12:28	71.36
2/10/2010 12:29	71.29
2/10/2010 12:30	71.02
2/10/2010 12:31	71.14
2/10/2010 12:32	71.24
2/10/2010 12:33	71.24
2/10/2010 12:34	71.23
2/10/2010 12:35	71.23
2/10/2010 12:36	71.43
2/10/2010 12:37	71.36
2/10/2010 12:38	70.76
2/10/2010 12:39	70.89
2/10/2010 12:40	71.21
2/10/2010 12:41	71.44
2/10/2010 12:42	71.34
2/10/2010 12:43	71.37
2/10/2010 12:44	71.27
2/10/2010 12:45	71.06
2/10/2010 12:46	71.02
2/10/2010 12:47	71.57
2/10/2010 12:48	71.44
2/10/2010 12:49	71.34
2/10/2010 12:50	71.42
2/10/2010 12:51	71.35
2/10/2010 12:52	71.24
2/10/2010 12:53	71.23
2/10/2010 12:54	71.01
2/10/2010 12:55	71.15
2/10/2010 12:56	71.2
2/10/2010 12:57	70.94
2/10/2010 12:58	70.99
2/10/2010 12:59	71.21
2/10/2010 13:00	71.25
2/10/2010 13:01	71.22
2/10/2010 13:02	71.19
2/10/2010 13:03	71.16
2/10/2010 13:04	71.13

Average 71.17547945

Set 1 - Run 2

Coal Flow 31	Coal Flow kpph
2/10/2010 13:18	71.2
2/10/2010 13:19	71.31
2/10/2010 13:20	71.4
2/10/2010 13:21	71.27
2/10/2010 13:22	71.5
2/10/2010 13:23	71.4
2/10/2010 13:24	71.45
2/10/2010 13:25	71.61
2/10/2010 13:26	71.71
2/10/2010 13:27	71.26
2/10/2010 13:28	71.34
2/10/2010 13:29	71.35
2/10/2010 13:30	71.46
2/10/2010 13:31	71.63
2/10/2010 13:32	71.65
2/10/2010 13:33	71.61
2/10/2010 13:34	71.57
2/10/2010 13:35	71.42
2/10/2010 13:36	71.24
2/10/2010 13:37	71.52
2/10/2010 13:38	71.43
2/10/2010 13:39	71.17
2/10/2010 13:40	71.1
2/10/2010 13:41	71.35
2/10/2010 13:42	71.43
2/10/2010 13:43	71.7
2/10/2010 13:44	71.58
2/10/2010 13:45	71.61
2/10/2010 13:46	71.75
2/10/2010 13:47	71.55
2/10/2010 13:48	71.49
2/10/2010 13:49	71.52
2/10/2010 13:50	71.29
2/10/2010 13:51	71.64
2/10/2010 13:52	71.98
2/10/2010 13:53	71.76
2/10/2010 13:54	71.15
2/10/2010 13:55	71.24
2/10/2010 13:56	71.11
2/10/2010 13:57	71.3
2/10/2010 13:58	71.63
2/10/2010 13:59	71.4
2/10/2010 14:00	71
2/10/2010 14:01	71.06
2/10/2010 14:02	71.23
2/10/2010 14:03	71.31
2/10/2010 14:04	71.35
2/10/2010 14:05	71.85
2/10/2010 14:06	71.73
2/10/2010 14:07	71.39
2/10/2010 14:08	71.29
2/10/2010 14:09	71.6
2/10/2010 14:10	71.25
2/10/2010 14:11	71.05
2/10/2010 14:12	71.27
2/10/2010 14:13	71.37
2/10/2010 14:14	71.41
2/10/2010 14:15	71.45
2/10/2010 14:16	71.69
2/10/2010 14:17	71.64
2/10/2010 14:18	71.49
2/10/2010 14:19	71.9
2/10/2010 14:20	71.8
2/10/2010 14:21	71.53
2/10/2010 14:22	71.62
2/10/2010 14:23	71.8
2/10/2010 14:24	71.64
2/10/2010 14:25	71.39
2/10/2010 14:26	71.78
2/10/2010 14:27	71.85
2/10/2010 14:28	71.57

Average 71.47028169

Set 1 - Run 3

Coal Flow 31	Coal Flow kpph
2/10/2010 14:43	71.72
2/10/2010 14:44	71.72
2/10/2010 14:45	71.61
2/10/2010 14:46	71.64
2/10/2010 14:47	71.7
2/10/2010 14:48	71.76
2/10/2010 14:49	71.83
2/10/2010 14:50	71.89
2/10/2010 14:51	71.95
2/10/2010 14:52	71.65
2/10/2010 14:53	71.83
2/10/2010 14:54	71.87
2/10/2010 14:55	71.85
2/10/2010 14:56	71.84
2/10/2010 14:57	72.16
2/10/2010 14:58	71.98
2/10/2010 14:59	71.68
2/10/2010 15:00	71.6
2/10/2010 15:01	71.58
2/10/2010 15:02	71.82
2/10/2010 15:03	71.86
2/10/2010 15:04	71.56
2/10/2010 15:05	71.48
2/10/2010 15:06	71.46
2/10/2010 15:07	71.67
2/10/2010 15:08	71.48
2/10/2010 15:09	71.37
2/10/2010 15:10	71.3
2/10/2010 15:11	71.55
2/10/2010 15:12	71.6
2/10/2010 15:13	71.38
2/10/2010 15:14	71.56
2/10/2010 15:15	71.6
2/10/2010 15:16	71.61
2/10/2010 15:17	71.61
2/10/2010 15:18	71.61
2/10/2010 15:19	71.61
2/10/2010 15:20	71.35
2/10/2010 15:21	71.54
2/10/2010 15:22	71.33
2/10/2010 15:23	71.3
2/10/2010 15:24	71.63
2/10/2010 15:25	71.6
2/10/2010 15:26	71.72
2/10/2010 15:27	71.45
2/10/2010 15:28	71.45
2/10/2010 15:29	71.16
2/10/2010 15:30	71.34
2/10/2010 15:31	71.33
2/10/2010 15:32	71.27
2/10/2010 15:33	71.52
2/10/2010 15:34	71.82
2/10/2010 15:35	71.51
2/10/2010 15:36	71.43
2/10/2010 15:37	71.6
2/10/2010 15:38	71.8
2/10/2010 15:39	72
2/10/2010 15:40	71.57
2/10/2010 15:41	71.76
2/10/2010 15:42	71.53
2/10/2010 15:43	71.54
2/10/2010 15:44	71.9
2/10/2010 15:45	71.93
2/10/2010 15:46	71.65
2/10/2010 15:47	71.87
2/10/2010 15:48	72.17
2/10/2010 15:49	71.92
2/10/2010 15:50	71.88
2/10/2010 15:51	72.37
2/10/2010 15:52	71.73
2/10/2010 15:53	71.65
2/10/2010 15:54	71.97
2/10/2010 15:55	71.93

Average 71.66452055

Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph	Coal Flow 32	Coal Flow kpph
2/10/2010 11:52	76.53	2/10/2010 13:18	76.41	2/10/2010 14:43	77.06
2/10/2010 11:53	76.33	2/10/2010 13:19	76.38	2/10/2010 14:44	77.05
2/10/2010 11:54	76.21	2/10/2010 13:20	76.8	2/10/2010 14:45	76.89
2/10/2010 11:55	76.01	2/10/2010 13:21	76.51	2/10/2010 14:46	76.72
2/10/2010 11:56	75.99	2/10/2010 13:22	76.58	2/10/2010 14:47	77.23
2/10/2010 11:57	76.13	2/10/2010 13:23	76.67	2/10/2010 14:48	76.91
2/10/2010 11:58	76.27	2/10/2010 13:24	76.66	2/10/2010 14:49	77.05
2/10/2010 11:59	76.41	2/10/2010 13:25	76.47	2/10/2010 14:50	76.86
2/10/2010 12:00	76.56	2/10/2010 13:26	76.85	2/10/2010 14:51	77.12
2/10/2010 12:01	76.49	2/10/2010 13:27	76.51	2/10/2010 14:52	76.91
2/10/2010 12:02	76.32	2/10/2010 13:28	76.47	2/10/2010 14:53	77.03
2/10/2010 12:03	76.49	2/10/2010 13:29	76.37	2/10/2010 14:54	77.25
2/10/2010 12:04	76.53	2/10/2010 13:30	76.64	2/10/2010 14:55	77.23
2/10/2010 12:05	76.41	2/10/2010 13:31	76.79	2/10/2010 14:56	77.16
2/10/2010 12:06	76.3	2/10/2010 13:32	76.85	2/10/2010 14:57	77.23
2/10/2010 12:07	76.31	2/10/2010 13:33	76.71	2/10/2010 14:58	77.33
2/10/2010 12:08	75.99	2/10/2010 13:34	76.49	2/10/2010 14:59	76.86
2/10/2010 12:09	76.06	2/10/2010 13:35	76.59	2/10/2010 15:00	76.97
2/10/2010 12:10	76.43	2/10/2010 13:36	76.79	2/10/2010 15:01	76.73
2/10/2010 12:11	76.5	2/10/2010 13:37	76.71	2/10/2010 15:02	76.89
2/10/2010 12:12	76.03	2/10/2010 13:38	76.55	2/10/2010 15:03	76.87
2/10/2010 12:13	76.23	2/10/2010 13:39	76.38	2/10/2010 15:04	76.78
2/10/2010 12:14	76.19	2/10/2010 13:40	76.35	2/10/2010 15:05	76.7
2/10/2010 12:15	76	2/10/2010 13:41	76.36	2/10/2010 15:06	76.77
2/10/2010 12:16	76.21	2/10/2010 13:42	76.55	2/10/2010 15:07	76.87
2/10/2010 12:17	76.58	2/10/2010 13:43	76.8	2/10/2010 15:08	76.63
2/10/2010 12:18	76.33	2/10/2010 13:44	76.97	2/10/2010 15:09	76.59
2/10/2010 12:19	76.32	2/10/2010 13:45	76.77	2/10/2010 15:10	76.61
2/10/2010 12:20	76.24	2/10/2010 13:46	76.78	2/10/2010 15:11	76.62
2/10/2010 12:21	76.52	2/10/2010 13:47	76.54	2/10/2010 15:12	76.64
2/10/2010 12:22	76.65	2/10/2010 13:48	76.39	2/10/2010 15:13	76.65
2/10/2010 12:23	76.27	2/10/2010 13:49	76.7	2/10/2010 15:14	76.67
2/10/2010 12:24	76.04	2/10/2010 13:50	76.68	2/10/2010 15:15	76.68
2/10/2010 12:25	76.26	2/10/2010 13:51	76.93	2/10/2010 15:16	76.69
2/10/2010 12:26	76.4	2/10/2010 13:52	77.08	2/10/2010 15:17	76.8
2/10/2010 12:27	76.43	2/10/2010 13:53	76.89	2/10/2010 15:18	76.91
2/10/2010 12:28	76.65	2/10/2010 13:54	76.62	2/10/2010 15:19	76.61
2/10/2010 12:29	76.68	2/10/2010 13:55	76.42	2/10/2010 15:20	76.57
2/10/2010 12:30	76.33	2/10/2010 13:56	76.25	2/10/2010 15:21	76.6
2/10/2010 12:31	76.39	2/10/2010 13:57	76.56	2/10/2010 15:22	76.62
2/10/2010 12:32	76.39	2/10/2010 13:58	77.01	2/10/2010 15:23	76.65
2/10/2010 12:33	76.46	2/10/2010 13:59	76.56	2/10/2010 15:24	76.48
2/10/2010 12:34	76.38	2/10/2010 14:00	76.23	2/10/2010 15:25	76.63
2/10/2010 12:35	76.39	2/10/2010 14:01	76.33	2/10/2010 15:26	76.84
2/10/2010 12:36	76.49	2/10/2010 14:02	76.38	2/10/2010 15:27	76.54
2/10/2010 12:37	76.36	2/10/2010 14:03	76.38	2/10/2010 15:28	76.52
2/10/2010 12:38	75.92	2/10/2010 14:04	76.55	2/10/2010 15:29	76.57
2/10/2010 12:39	75.99	2/10/2010 14:05	77.13	2/10/2010 15:30	76.77
2/10/2010 12:40	76.32	2/10/2010 14:06	76.99	2/10/2010 15:31	76.66
2/10/2010 12:41	76.52	2/10/2010 14:07	76.62	2/10/2010 15:32	76.51
2/10/2010 12:42	76.37	2/10/2010 14:08	76.66	2/10/2010 15:33	76.35
2/10/2010 12:43	76.64	2/10/2010 14:09	76.41	2/10/2010 15:34	76.63
2/10/2010 12:44	76.61	2/10/2010 14:10	76.35	2/10/2010 15:35	76.98
2/10/2010 12:45	76.33	2/10/2010 14:11	76.38	2/10/2010 15:36	76.43
2/10/2010 12:46	76.34	2/10/2010 14:12	76.45	2/10/2010 15:37	76.9
2/10/2010 12:47	76.68	2/10/2010 14:13	76.53	2/10/2010 15:38	77.16
2/10/2010 12:48	76.73	2/10/2010 14:14	76.6	2/10/2010 15:39	77.36
2/10/2010 12:49	76.62	2/10/2010 14:15	76.76	2/10/2010 15:40	77.22
2/10/2010 12:50	76.49	2/10/2010 14:16	76.93	2/10/2010 15:41	77.04
2/10/2010 12:51	76.35	2/10/2010 14:17	76.96	2/10/2010 15:42	77
2/10/2010 12:52	76.21	2/10/2010 14:18	76.73	2/10/2010 15:43	76.98
2/10/2010 12:53	76.39	2/10/2010 14:19	77.04	2/10/2010 15:44	77.31
2/10/2010 12:54	76.29	2/10/2010 14:20	76.92	2/10/2010 15:45	77.23
2/10/2010 12:55	76.5	2/10/2010 14:21	76.63	2/10/2010 15:46	77.09
2/10/2010 12:56	76.55	2/10/2010 14:22	76.74	2/10/2010 15:47	76.94
2/10/2010 12:57	76.01	2/10/2010 14:23	76.96	2/10/2010 15:48	77.48
2/10/2010 12:58	76	2/10/2010 14:24	76.97	2/10/2010 15:49	77.31
2/10/2010 12:59	76.29	2/10/2010 14:25	76.69	2/10/2010 15:50	77.04
2/10/2010 13:00	76.3	2/10/2010 14:26	76.77	2/10/2010 15:51	77.4
2/10/2010 13:01	76.21	2/10/2010 14:27	76.95	2/10/2010 15:52	76.89
2/10/2010 13:02	76.11	2/10/2010 14:28	76.73	2/10/2010 15:53	76.76
2/10/2010 13:03	76.37			2/10/2010 15:54	77.1
2/10/2010 13:04	76.32			2/10/2010 15:55	77.11
Average	76.34178082	Average	76.65014085	Average	76.88

Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph	Coal Flow 33	Coal Flow kpph
2/10/2010 11:52	76.58	2/10/2010 13:18	76.25	2/10/2010 14:43	77.02
2/10/2010 11:53	76.45	2/10/2010 13:19	76.34	2/10/2010 14:44	77.05
2/10/2010 11:54	76.29	2/10/2010 13:20	76.66	2/10/2010 14:45	76.89
2/10/2010 11:55	76.06	2/10/2010 13:21	76.57	2/10/2010 14:46	76.74
2/10/2010 11:56	75.96	2/10/2010 13:22	76.54	2/10/2010 14:47	77.03
2/10/2010 11:57	76.1	2/10/2010 13:23	76.79	2/10/2010 14:48	77
2/10/2010 11:58	76.3	2/10/2010 13:24	76.77	2/10/2010 14:49	77
2/10/2010 11:59	76.36	2/10/2010 13:25	76.63	2/10/2010 14:50	77.04
2/10/2010 12:00	76.55	2/10/2010 13:26	76.68	2/10/2010 14:51	77.08
2/10/2010 12:01	76.56	2/10/2010 13:27	76.34	2/10/2010 14:52	77.24
2/10/2010 12:02	76.43	2/10/2010 13:28	76.35	2/10/2010 14:53	76.98
2/10/2010 12:03	76.59	2/10/2010 13:29	76.54	2/10/2010 14:54	77.16
2/10/2010 12:04	76.52	2/10/2010 13:30	76.73	2/10/2010 14:55	77.44
2/10/2010 12:05	76.39	2/10/2010 13:31	76.77	2/10/2010 14:56	77.09
2/10/2010 12:06	76.34	2/10/2010 13:32	76.76	2/10/2010 14:57	77.11
2/10/2010 12:07	76.29	2/10/2010 13:33	76.75	2/10/2010 14:58	77.23
2/10/2010 12:08	75.88	2/10/2010 13:34	76.51	2/10/2010 14:59	77.16
2/10/2010 12:09	76.07	2/10/2010 13:35	76.49	2/10/2010 15:00	77.05
2/10/2010 12:10	76.38	2/10/2010 13:36	76.58	2/10/2010 15:01	76.94
2/10/2010 12:11	76.22	2/10/2010 13:37	76.66	2/10/2010 15:02	76.92
2/10/2010 12:12	75.89	2/10/2010 13:38	76.47	2/10/2010 15:03	76.66
2/10/2010 12:13	76.05	2/10/2010 13:39	76.18	2/10/2010 15:04	76.65
2/10/2010 12:14	76.21	2/10/2010 13:40	76.24	2/10/2010 15:05	76.7
2/10/2010 12:15	76.02	2/10/2010 13:41	76.41	2/10/2010 15:06	76.75
2/10/2010 12:16	76.14	2/10/2010 13:42	76.59	2/10/2010 15:07	76.57
2/10/2010 12:17	76.45	2/10/2010 13:43	76.76	2/10/2010 15:08	76.35
2/10/2010 12:18	76.37	2/10/2010 13:44	76.86	2/10/2010 15:09	76.76
2/10/2010 12:19	76.42	2/10/2010 13:45	76.92	2/10/2010 15:10	76.57
2/10/2010 12:20	76.31	2/10/2010 13:46	76.99	2/10/2010 15:11	76.61
2/10/2010 12:21	76.36	2/10/2010 13:47	76.62	2/10/2010 15:12	76.72
2/10/2010 12:22	76.58	2/10/2010 13:48	76.66	2/10/2010 15:13	76.39
2/10/2010 12:23	76.6	2/10/2010 13:49	76.87	2/10/2010 15:14	76.71
2/10/2010 12:24	76.18	2/10/2010 13:50	76.46	2/10/2010 15:15	76.59
2/10/2010 12:25	76.48	2/10/2010 13:51	76.55	2/10/2010 15:16	76.73
2/10/2010 12:26	76.59	2/10/2010 13:52	76.86	2/10/2010 15:17	76.94
2/10/2010 12:27	76.64	2/10/2010 13:53	76.77	2/10/2010 15:18	77
2/10/2010 12:28	76.79	2/10/2010 13:54	76.25	2/10/2010 15:19	76.63
2/10/2010 12:29	76.74	2/10/2010 13:55	76.26	2/10/2010 15:20	76.64
2/10/2010 12:30	76.43	2/10/2010 13:56	76.45	2/10/2010 15:21	76.73
2/10/2010 12:31	76.64	2/10/2010 13:57	76.5	2/10/2010 15:22	76.82
2/10/2010 12:32	76.34	2/10/2010 13:58	76.94	2/10/2010 15:23	76.7
2/10/2010 12:33	76.44	2/10/2010 13:59	76.64	2/10/2010 15:24	76.55
2/10/2010 12:34	76.53	2/10/2010 14:00	76.38	2/10/2010 15:25	76.52
2/10/2010 12:35	76.46	2/10/2010 14:01	76.21	2/10/2010 15:26	76.51
2/10/2010 12:36	76.4	2/10/2010 14:02	76.16	2/10/2010 15:27	76.51
2/10/2010 12:37	76.48	2/10/2010 14:03	76.53	2/10/2010 15:28	76.7
2/10/2010 12:38	76.04	2/10/2010 14:04	76.56	2/10/2010 15:29	76.41
2/10/2010 12:39	76.05	2/10/2010 14:05	77.08	2/10/2010 15:30	76.87
2/10/2010 12:40	76.17	2/10/2010 14:06	76.63	2/10/2010 15:31	76.81
2/10/2010 12:41	76.54	2/10/2010 14:07	76.41	2/10/2010 15:32	76.39
2/10/2010 12:42	76.53	2/10/2010 14:08	76.57	2/10/2010 15:33	76.63
2/10/2010 12:43	76.8	2/10/2010 14:09	76.5	2/10/2010 15:34	76.72
2/10/2010 12:44	76.6	2/10/2010 14:10	76.36	2/10/2010 15:35	76.76
2/10/2010 12:45	76.33	2/10/2010 14:11	76.51	2/10/2010 15:36	76.81
2/10/2010 12:46	76.15	2/10/2010 14:12	76.33	2/10/2010 15:37	76.85
2/10/2010 12:47	76.65	2/10/2010 14:13	76.51	2/10/2010 15:38	76.96
2/10/2010 12:48	76.65	2/10/2010 14:14	76.82	2/10/2010 15:39	77.55
2/10/2010 12:49	76.77	2/10/2010 14:15	76.8	2/10/2010 15:40	77.34
2/10/2010 12:50	76.73	2/10/2010 14:16	76.69	2/10/2010 15:41	77.26
2/10/2010 12:51	76.55	2/10/2010 14:17	76.81	2/10/2010 15:42	76.83
2/10/2010 12:52	76.19	2/10/2010 14:18	76.76	2/10/2010 15:43	76.96
2/10/2010 12:53	76.36	2/10/2010 14:19	77	2/10/2010 15:44	77.19
2/10/2010 12:54	76.31	2/10/2010 14:20	77.02	2/10/2010 15:45	77.03
2/10/2010 12:55	76.51	2/10/2010 14:21	76.76	2/10/2010 15:46	77.31
2/10/2010 12:56	76.65	2/10/2010 14:22	76.81	2/10/2010 15:47	77.13
2/10/2010 12:57	76.3	2/10/2010 14:23	76.97	2/10/2010 15:48	77.61
2/10/2010 12:58	76.33	2/10/2010 14:24	76.87	2/10/2010 15:49	77.08
2/10/2010 12:59	76.58	2/10/2010 14:25	76.72	2/10/2010 15:50	76.93
2/10/2010 13:00	76.26	2/10/2010 14:26	76.84	2/10/2010 15:51	77.36
2/10/2010 13:01	76.17	2/10/2010 14:27	77.02	2/10/2010 15:52	76.87
2/10/2010 13:02	76.26	2/10/2010 14:28	76.66	2/10/2010 15:53	76.93
2/10/2010 13:03	76.36			2/10/2010 15:54	77.06
2/10/2010 13:04	76.4			2/10/2010 15:55	77.2
Average	76.38493151	Average	76.62323944	Average	76.89082192

Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph	Coal Flow 34	Coal Flow kpph
2/10/2010 11:52	76.5	2/10/2010 13:18	76.21	2/10/2010 14:43	76.79
2/10/2010 11:53	76.46	2/10/2010 13:19	76.12	2/10/2010 14:44	76.81
2/10/2010 11:54	76.42	2/10/2010 13:20	76.67	2/10/2010 14:45	76.83
2/10/2010 11:55	76.39	2/10/2010 13:21	76.44	2/10/2010 14:46	76.85
2/10/2010 11:56	76.35	2/10/2010 13:22	76.3	2/10/2010 14:47	76.88
2/10/2010 11:57	76.31	2/10/2010 13:23	76.33	2/10/2010 14:48	76.9
2/10/2010 11:58	76.28	2/10/2010 13:24	76.35	2/10/2010 14:49	76.92
2/10/2010 11:59	76.27	2/10/2010 13:25	76.38	2/10/2010 14:50	76.94
2/10/2010 12:00	76.27	2/10/2010 13:26	76.4	2/10/2010 14:51	76.96
2/10/2010 12:01	76.27	2/10/2010 13:27	76.43	2/10/2010 14:52	76.98
2/10/2010 12:02	76.28	2/10/2010 13:28	76.45	2/10/2010 14:53	77
2/10/2010 12:03	76.28	2/10/2010 13:29	76.47	2/10/2010 14:54	77.02
2/10/2010 12:04	76.28	2/10/2010 13:30	76.5	2/10/2010 14:55	77.05
2/10/2010 12:05	76.28	2/10/2010 13:31	76.52	2/10/2010 14:56	77.07
2/10/2010 12:06	76.29	2/10/2010 13:32	76.55	2/10/2010 14:57	77.09
2/10/2010 12:07	76.29	2/10/2010 13:33	76.57	2/10/2010 14:58	77.11
2/10/2010 12:08	75.82	2/10/2010 13:34	76.6	2/10/2010 14:59	77.1
2/10/2010 12:09	75.85	2/10/2010 13:35	76.68	2/10/2010 15:00	77.09
2/10/2010 12:10	76.27	2/10/2010 13:36	76.79	2/10/2010 15:01	77.07
2/10/2010 12:11	76.4	2/10/2010 13:37	76.9	2/10/2010 15:02	77.06
2/10/2010 12:12	76.39	2/10/2010 13:38	76.8	2/10/2010 15:03	77.05
2/10/2010 12:13	76.37	2/10/2010 13:39	76.64	2/10/2010 15:04	77.03
2/10/2010 12:14	76.35	2/10/2010 13:40	76.48	2/10/2010 15:05	77.02
2/10/2010 12:15	76.34	2/10/2010 13:41	76.48	2/10/2010 15:06	77.01
2/10/2010 12:16	76.32	2/10/2010 13:42	76.52	2/10/2010 15:07	76.99
2/10/2010 12:17	76.31	2/10/2010 13:43	76.57	2/10/2010 15:08	76.98
2/10/2010 12:18	76.29	2/10/2010 13:44	76.61	2/10/2010 15:09	76.96
2/10/2010 12:19	76.27	2/10/2010 13:45	76.66	2/10/2010 15:10	76.95
2/10/2010 12:20	76.26	2/10/2010 13:46	76.71	2/10/2010 15:11	76.94
2/10/2010 12:21	76.32	2/10/2010 13:47	76.67	2/10/2010 15:12	76.92
2/10/2010 12:22	76.41	2/10/2010 13:48	76.6	2/10/2010 15:13	76.91
2/10/2010 12:23	76.51	2/10/2010 13:49	76.54	2/10/2010 15:14	76.9
2/10/2010 12:24	76.15	2/10/2010 13:50	76.47	2/10/2010 15:15	76.88
2/10/2010 12:25	76.1	2/10/2010 13:51	76.49	2/10/2010 15:16	76.87
2/10/2010 12:26	76.3	2/10/2010 13:52	76.54	2/10/2010 15:17	76.85
2/10/2010 12:27	76.5	2/10/2010 13:53	76.58	2/10/2010 15:18	76.84
2/10/2010 12:28	76.7	2/10/2010 13:54	76.63	2/10/2010 15:19	76.83
2/10/2010 12:29	76.74	2/10/2010 13:55	76.68	2/10/2010 15:20	76.81
2/10/2010 12:30	76.7	2/10/2010 13:56	76.72	2/10/2010 15:21	76.8
2/10/2010 12:31	76.67	2/10/2010 13:57	76.77	2/10/2010 15:22	76.79
2/10/2010 12:32	76.63	2/10/2010 13:58	76.82	2/10/2010 15:23	76.77
2/10/2010 12:33	76.6	2/10/2010 13:59	76.71	2/10/2010 15:24	76.76
2/10/2010 12:34	76.56	2/10/2010 14:00	76.57	2/10/2010 15:25	76.75
2/10/2010 12:35	76.52	2/10/2010 14:01	76.42	2/10/2010 15:26	76.72
2/10/2010 12:36	76.49	2/10/2010 14:02	76.28	2/10/2010 15:27	76.69
2/10/2010 12:37	76.45	2/10/2010 14:03	76.49	2/10/2010 15:28	76.66
2/10/2010 12:38	76.25	2/10/2010 14:04	76.8	2/10/2010 15:29	76.63
2/10/2010 12:39	75.98	2/10/2010 14:05	77.11	2/10/2010 15:30	76.61
2/10/2010 12:40	75.96	2/10/2010 14:06	77.08	2/10/2010 15:31	76.58
2/10/2010 12:41	76.06	2/10/2010 14:07	76.95	2/10/2010 15:32	76.55
2/10/2010 12:42	76.15	2/10/2010 14:08	76.82	2/10/2010 15:33	76.52
2/10/2010 12:43	76.25	2/10/2010 14:09	76.69	2/10/2010 15:34	76.63
2/10/2010 12:44	76.34	2/10/2010 14:10	76.56	2/10/2010 15:35	76.76
2/10/2010 12:45	76.42	2/10/2010 14:11	76.43	2/10/2010 15:36	76.89
2/10/2010 12:46	76.5	2/10/2010 14:12	76.46	2/10/2010 15:37	77.02
2/10/2010 12:47	76.58	2/10/2010 14:13	76.53	2/10/2010 15:38	77.15
2/10/2010 12:48	76.66	2/10/2010 14:14	76.6	2/10/2010 15:39	77.28
2/10/2010 12:49	76.74	2/10/2010 14:15	76.67	2/10/2010 15:40	77.27
2/10/2010 12:50	76.67	2/10/2010 14:16	76.74	2/10/2010 15:41	77.24
2/10/2010 12:51	76.53	2/10/2010 14:17	76.81	2/10/2010 15:42	77.21
2/10/2010 12:52	76.39	2/10/2010 14:18	76.8	2/10/2010 15:43	77.18
2/10/2010 12:53	76.24	2/10/2010 14:19	76.78	2/10/2010 15:44	77.15
2/10/2010 12:54	76.1	2/10/2010 14:20	76.76	2/10/2010 15:45	77.12
2/10/2010 12:55	76.23	2/10/2010 14:21	76.74	2/10/2010 15:46	77.09
2/10/2010 12:56	76.47	2/10/2010 14:22	76.72	2/10/2010 15:47	77.06
2/10/2010 12:57	76.48	2/10/2010 14:23	76.7	2/10/2010 15:48	77.01
2/10/2010 12:58	76.4	2/10/2010 14:24	76.68	2/10/2010 15:49	76.95
2/10/2010 12:59	76.31	2/10/2010 14:25	76.65	2/10/2010 15:50	76.9
2/10/2010 13:00	76.23	2/10/2010 14:26	76.63	2/10/2010 15:51	76.85
2/10/2010 13:01	76.21	2/10/2010 14:27	76.61	2/10/2010 15:52	76.8
2/10/2010 13:02	76.21	2/10/2010 14:28	76.59	2/10/2010 15:53	76.79
2/10/2010 13:03	76.21			2/10/2010 15:54	76.79
2/10/2010 13:04	76.21			2/10/2010 15:55	76.79

Average 76.35054795 Average 76.60591549 Average 76.91808219

Total SUM 300.2527397 Total SUM 301.3495775 Total SUM 302.3534247

Heat Input (MMBtu/Hr)	3631	3644	3656	Heating Value
	Run 1	Run 2	Run 3	12093.1 BTU/#

ESP Data

ESP Power

Monday		1-Feb-10			
		32-Side	31-Side	TOTAL	LOAD
Run - 1, Scenario 3		432	73	505	270
Run - 2, Scenario 3		439	69	508	270
Run - 3, Scenario 2		104	62	166	320
Run - 4, Scenario 2		101	62	163	320

Tuesday		2-Feb-10			
		32-Side	31-Side	TOTAL	LOAD
Run - 1, Scenario 10		104	70	174	270
Run - 2, Scenario 11		389	79	468	270
Run - 3, Scenario 12		435	73	508	270
Run - 4, Scenario 1		104	62	166	365
Run - 5, Scenario 1		104	62	166	365
Run - 6, Scenario 1		104	62	166	365

Wednesday		3-Feb-10			
		32-Side	31-Side	TOTAL	LOAD
Run - 1, Scenario 4		104	55	159	365
Run - 2, Scenario 5		106	62	168	365
Run - 3, Scenario 6		104	59	163	365

Monday		8-Feb-10			
		32-Side	31-Side	TOTAL	LOAD
Run - 1, Scenario 2		104	62	166	320
Run - 1, Scenario 2		104	62	166	320
Run - 2, Scenario 2		104	59	163	320
Run - 3, Scenario 7		104	62	166	320
Run - 4, Scenario 8		104	62	166	320
Run - 5, Scenario 9		104	62	166	320

Tuesday		9-Feb-10			
		32-Side	31-Side	TOTAL	LOAD
Run - 1, Scenario 3		473	90	563	270
Run - 2, Scenario 3		459	73	532	270
Run - 3, Scenario 10		324	76	400	270
Run - 4, Scenario 11		104	83	187	270
Run - 5, Scenario 12		470	76	546	270

APPENDIX 4
LABORATORY ANALYSIS

Ammonia

Your Project #: LAKELAND ELECTRIC
Site: MCINTOSH 3
Your C.O.C. #: 0619

Attention: Mike Taylor
Catalyst Air Management
2505 Byington-Solway Rd
Knoxville, TN
USA 37931

Report Date: 2010/02/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B019369
Received: 2010/02/18, 10:13


Sample Matrix: Stack Sampling Train
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Ammonium in H2SO4 Impingers (CTM-027) @	7	2010/02/23	2010/02/23	BRL SOP-00107	EPA CTM-027
Volume of Sulfuric Acid Impinger	7	N/A	2010/02/23		

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed in Maxxam Mississauga under Maxxam Burlington SCC Accreditation

Encryption Key

 Mike Challis

25 Feb 2010 08:47:32 -05:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

MIKE CHALLIS, CET, B.Sc, C.Chem, Customer Service Manager, US Air Toxics
Email: Mike.Challis@MaxxamAnalytics.com
Phone# (905) 817-5790

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CALA have approved this reporting process and electronic report format.

Total cover pages: 1

Page 1 of 6

Maxxam Job #: B019369
Report Date: 2010/02/24

Catalyst Air Management
Client Project #: LAKELAND ELECTRIC
Project name: MCINTOSH 3

EPA CTM 027 AMMONIA (STACK SAMPLING TRAIN)

Maxxam ID		FC6951		FC6952		
Sampling Date		2010/02/10		2010/02/10		
COC Number		0619		0619		
	Units	BLANK-H2SO4	RDL	RUN1-PROBE/IMP1	RDL	QC Batch

Volume	ml	490	1	300	1	2085613
Ammonium (NH4)	ug	<13	13	<15	15	2085615

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FC6953	FC6953		FC6954	
Sampling Date		2010/02/10	2010/02/10		2010/02/10	
COC Number		0619	0619		0619	
	Units	RUN1-IMP2/IMP3	RUN1-IMP2/IMP3 Lab-Dup	RDL	RUN2-PROBE/IMP1	RDL QC Batch

Volume	ml	190	N/A	1	310	1	2085613
Ammonium (NH4)	ug	<13	<13	13	17	15	2085615

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FC6955		FC6956		
Sampling Date		2010/02/10		2010/02/10		
COC Number		0619		0619		
	Units	RUN2-IMP2/IMP3	RDL	RUN3-PROBE/IMP1	RDL	QC Batch

Volume	ml	170	1	300	1	2085613
Ammonium (NH4)	ug	<13	13	23	15	2085615

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		FC6957		
Sampling Date		2010/02/10		
COC Number		0619		
	Units	RUN3-IMP2/IMP3	RDL	QC Batch

Volume	ml	140	1	2085613
Ammonium (NH4)	ug	<13	13	2085615

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Job #: B019369
Report Date: 2010/02/24

Catalyst Air Management
Client Project #: LAKELAND ELECTRIC
Project name: MCINTOSH 3

Test Summary

Maxxam ID FC6951
Sample ID BLANK-H2SO4
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam ID FC6952
Sample ID RUN1-PROBE/IMP1
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam ID FC6953
Sample ID RUN1-IMP2/IMP3
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam ID FC6953 Dup
Sample ID RUN1-IMP2/IMP3
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S

Maxxam ID FC6954
Sample ID RUN2-PROBE/IMP1
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam ID FC6955
Sample ID RUN2-IMP2/IMP3
Matrix Stack Sampling Train
Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam Job #: B019369
Report Date: 2010/02/24

Catalyst Air Management
Client Project #: LAKELAND ELECTRIC
Project name: MCINTOSH 3

Test Summary

Maxxam ID FC6956
Sample ID RUN3-PROBE/IMP1
Matrix Stack Sampling Train

Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam ID FC6957
Sample ID RUN3-IMP2/IMP3
Matrix Stack Sampling Train

Collected 2010/02/10
Shipped
Received 2010/02/18

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Ammonium in H2SO4 Impingers (CTM-027)	IC/SPEC	2085615	2010/02/23	2010/02/23	A S
Volume of Sulfuric Acid Impinger		2085613	N/A	2010/02/23	A S

Maxxam Job #: B019369
Report Date: 2010/02/24

Catalyst Air Management
Client Project #: LAKELAND ELECTRIC
Project name: MCINTOSH 3

GENERAL COMMENTS

Results relate only to the items tested.

Catalyst Air Management
 Attention: Mike Taylor
 Client Project #: LAKELAND ELECTRIC
 P.O. #:
 Project name: MCINTOSH 3

Quality Assurance Report
 Maxxam Job Number: GB019369

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyy/mm/dd	Value	%Recovery	Units	QC Limits
2085615 A_S	Matrix Spike (FC6953)	Ammonium (NH4)	2010/02/23		99	%	75 - 125
	Spiked Blank	Ammonium (NH4)	2010/02/23		100	%	90 - 110
	Method Blank	Ammonium (NH4)	2010/02/23	<13		ug	
	RPD - Sample/Sample Dup	Ammonium (NH4)	2010/02/23	NC		%	20

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
 Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
 Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
 NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Chain of Custody Form - Source

U623


Feb 17 2010 3:39PM

HP LASERJET F

C11

610-346-9573

P.3

		6740 Campobello Road Mississauga, ON L5N 2L8 www.maxxamanalytics.com		Toll Free: (800) 563-6266 Phone: (905) 817-5700 Fax: (905) 817-5777		Page <u>1</u> of <u>1</u>														
CLIENT INFORMATION SECTION		Company Name: <u>Catalyst Air Management Inc</u> Project Manager: <u>M. Taylor</u> e-mail: _____ Address: <u>2505 Byington-Solway Road</u> <u>Knoxville TN 37931</u> Phone: <u>865 531-0675</u> Fax: <u>865 531-0750</u> Sampled by: <u>H. Love / D. Urban</u>		ANALYSIS REQUESTED		NH ₃ CTM-027														
MAXXAM use only	Field Sample ID	# Bottles	Collection Date	Collection Time	Initial Impinger Charge Volumes (mL)															
	<u>Run 1 Probe / Imp 1</u>	<u>1</u>	<u>2/10/10</u>		<u>Imp 1 - 00ml</u>															
	<u>Run 1 Imp 2/3</u>	<u>1</u>			<u>Imp 2 - 100ml</u>															
	<u>Run 2 Probe / Imp 1</u>	<u>1</u>			<u>Imp 1 - 100ml</u>															
	<u>Run 2 Imp 2/3</u>	<u>1</u>			<u>Imp 2 - 100ml</u>															
	<u>Run 3 Probe / Imp 1</u>	<u>1</u>			<u>Imp 1 - 100ml</u>															
	<u>Run 3 Imp 2/3</u>	<u>1</u>			<u>Imp 2 - 100ml</u>															
	<u>1M H₂SO₄ BLANK</u>	<u>1</u>			<u>Imp 3 - 0</u>															
TAT Requirement STD 10 Business day <input type="checkbox"/> Rush 5 Business day <input type="checkbox"/> Rush 2 Business day <input type="checkbox"/> Rush 1 Business day <input type="checkbox"/> Other (specify): _____		PROJECT INFORMATION Project #: _____ Name: <u>Lakeland - Melutosh 3</u> PO #: _____ Maxxam Quote #: _____ Maxxam Contact: _____			REPORTING REQUIREMENTS Summary Report only <input type="checkbox"/> Summary Report & _____ <input type="checkbox"/> Full Data Package _____ <input type="checkbox"/> EDD _____ <input type="checkbox"/>			PROJECT SPECIFIC COMMENTS <u>CTM-027 NH₃ - do not exceed 2 week hold time!</u> *Initial Impinger charge volumes are required before the following analysis can be started: Method 26, CTM-027 & Method 8 Method 23 / TOSA NATO TEF <input type="checkbox"/> TEF x DL <input type="checkbox"/> TEF x 0 DL <input type="checkbox"/> WHO TEF <input type="checkbox"/> TEF x 0.5 DL <input type="checkbox"/>												
Client Signature: <u>[Signature]</u> Affiliation: <u>[Signature]</u> Date/Time: <u>2/10/10 11:30</u>		Received by: <u>[Signature]</u> Affiliation: _____ Date/Time: <u>10/17/10 1200</u>																		

SO₃

CATALYST AIR MANAGEMENT, INC.
Controlled Condensate - Method 8A

Client: Lakeland Electric
Unit: McIntosh Unit 3
Location: Stack

Run Number:	1	2	3	4
Date:	2/1/2010	2/1/2010	2/1/2010	2/1/2010
Start Time:	10:35	13:10	15:43	17:56
End Time:	11:35	14:10	16:43	18:56
VMstd:	29.790	29.807	29.677	29.675
Sample Volume (ml):	54	53	88	62
Aliquot Volume (ml):	20	20	20	20
Titrant Ba(ClO4)2 : Volume (ml)	1.250	1.825	1.500	1.950
Normality Ba(ClO4)2:	0.00950	0.00950	0.00950	0.00950
H2SO4/SO3 (lbs/dscf):	1.16E-07	1.67E-07	2.28E-07	2.09E-07
PPM (as SO3)	0.559	0.801	1.098	1.006

CATALYST AIR MANAGEMENT, INC.
Controlled Condensate - Method 8A

Client: Lakeland Electric
Unit: McIntosh Unit 3
Location: Stack

Run Number:	5	6	7	8	9
Date:	2/2/2010	2/2/2010	2/2/2010	2/2/2010	2/2/2010
Start Time:	6:35	9:02	15:05	17:30	19:44
End Time:	7:35	10:02	16:05	18:30	20:44
VMstd:	29.547	29.581	29.283	29.376	29.514
Sample Volume (ml):	63	53	67	87	71
Aliquot Volume (ml):	20	20	20	20	20
Titrant Ba(ClO ₄) ₂ : Volume (ml)	0.650	0.950	1.875	1.575	1.650
Normality Ba(ClO ₄) ₂ :	0.00950	0.00950	0.00950	0.00950	0.00950
H ₂ SO ₄ /SO ₃ (lbs/dscf):	7.12E-08	8.74E-08	2.20E-07	2.40E-07	2.04E-07
PPM (as SO ₃)	0.342	0.420	1.059	1.151	0.980

CATALYST AIR MANAGEMENT, INC.
Controlled Condensate - Method 8A

Client: Lakeland Electric
Unit: McIntosh Unit 3
Location: Stack

Run Number:	10	11	12
Date:	2/3/2010	2/3/2010	2/3/2010
Start Time:	8:45	12:55	17:25
End Time:	9:45	13:55	18:25
VMstd:	29.905	29.820	29.687
Sample Volume (ml):	57	69	68
Aliquot Volume (ml):	20	20	20
Titrant Ba(ClO4)2 : Volume (ml)	1.950	1.750	1.700
Normality Ba(ClO4)2:	0.00950	0.00950	0.00950
H2SO4/SO3 (lbs/dscf):	1.91E-07	2.08E-07	2.00E-07
PPM (as SO3)	0.918	1.000	0.961

CATALYST AIR MANAGEMENT, INC.
Controlled Condensate - Method 8A

Client: Lakeland Electric
Unit: McIntosh Unit 3
Location: Unit 3 Stack

Run Number:	13	14	15	16	17
Date:	2/8/2010	2/8/2010	2/8/2010	2/8/2010	2/8/2010
Start Time:	8:30	10:20	12:20	15:30	17:07
End Time:	9:30	11:20	13:20	16:30	18:07
VMstd:	30.045	29.813	29.519	29.548	29.499
Sample Volume (ml):	62	44	64	50	50
Aliquot Volume (ml):	20	20	20	20	20
Titrant Ba(ClO4)2 : Volume (ml)	0.650	1.100	0.950	1.150	1.100
Normality Ba(ClO4)2:	0.00940	0.00940	0.00940	0.00940	0.00940
H2SO4/SO3 (lbs/dscf):	6.81E-08	8.25E-08	1.05E-07	9.89E-08	9.47E-08
PPM (as SO3)	0.328	0.397	0.503	0.475	0.455

CATALYST AIR MANAGEMENT, INC.
Controlled Condensate - Method 8A

Client: Lakeland Electric
Unit: McIntosh Unit 3
Location: Stack

Run Number:	18	19	20	21	22
Date:	2/9/2010	2/9/2010	2/9/2010	2/9/2010	2/9/2010
Start Time:	6:18	8:05	9:55	11:40	13:25
End Time:	7:18	9:05	10:55	12:40	14:25
VMstd:	29.487	29.233	29.464	28.940	28.946
Sample Volume (ml):	62	45	42	52	50
Aliquot Volume (ml):	20	20	20	20	20
Titrant Ba(ClO4)2 : Volume (ml)	0.850	1.450	1.675	1.200	1.275
Normality Ba(ClO4)2:	0.00940	0.00940	0.00940	0.00940	0.00940
H2SO4/SO3 (lbs/dscf):	9.08E-08	1.13E-07	1.21E-07	1.10E-07	1.12E-07
PPM (as SO3)	0.437	0.545	0.583	0.527	0.538

Coal

C-3 Coal Database

DATE SAMPLED	SAMPLE ID NO.	% ADL	AS RCVD % MOIST.	AS RCVD % ASH	AS RCVD % VOL'S	AS RCVD FIXED C	AS RCVD % SULFUR	AS RCVD BTU	
1/31/10	0020101-01E	6.91	8.60	13.31	31.28	46.81	1.65	12468	2-1-10 testing
2/1/10	0020203-01	4.96	6.91	12.17	32.41	48.52	1.55	12821	2-2-10 testing
2/2/10	0020402-01	6.92	8.37	13.55	31.38	46.70	1.72	12436	2-3-10 testing
2/3/10	0020503-01E	6.92	9.21	11.23	31.87	47.69	1.66	12682	
2/4/10	0020701-01E	5.93	6.91	11.55	32.54	49.00	1.81	12961	
2/5/10	0020701-02E	5.80	6.86	11.09	32.77	49.29	1.72	13080	
2/6/10	0020701-03E	6.28	7.40	10.69	32.51	49.40	1.43	13053	
2/7/10	0020802-01E	5.86	7.55	10.09	31.69	50.68	1.31	13123	2-8-10 testing
2/8/10	0021001-01E	6.75	8.37	12.03	31.33	48.27	1.43	11880	2-9-10 testing
2/9/10	0021101-01E	6.00	7.32	11.55	32.25	48.88	1.47	12093	
2/10/10	0021204-01E	5.93	7.34	12.54	32.15	47.97	1.36	11982	

	Run	COAL KLB/H		Heating Value		Avg. HI MMBtu/hr	Sulfur%
		CEMS Time	Avg. Flow	BTU/#			
Feb. 1	1	1035-1135	222	12468		2767.01	1.65
	2	1310-1410	223			2776.60	1.65
	3	1543-1643	265			3305.44	1.65
	4	1756-1856	265			3307.41	1.65
Feb. 2	5	0635-0735	221	12821		2832.11	1.55
	6	0902-1002	222			2842.41	1.55
	7	1305-1405	279			3571.48	1.55
	8	1730-1830	304			3893.54	1.55
	9	1944-2044	305			3907.07	1.55
Feb. 3	10	0845-0945	306	12436		3806.83	1.72
	11	1255-1355	308			3824.92	1.72
	12	1725-1825	307			3822.06	1.72
Feb. 8	13	0830-0930	251	13123		3291.19	1.31
	14	1020-1120	247			3239.91	1.31
	15	1220-1320	250			3286.78	1.31
	16	1530-1630	250			3284.64	1.31
	17	1707-1807	251			3287.72	1.31
Feb. 9	18	0618-0718	222	11880		2911.31	1.43
	19	0805-0905	223			2928.06	1.43
	20	0955-1055	224			2938.39	1.43
	21	1140-1240	226			2959.50	1.43
	22	1325-1425	226			2960.76	1.43

From EtaPro

APPENDIX 5
REFERENCE METHOD QUALITY ASSURANCE

Isokinetic Sampling Equipment

Catalyst Air Management, Inc.

METER BOX CALIBRATION

METER BOX NUMBER: **013**
 DATE: 01/05/10
 CALIBRATED BY: Urban
 BENCH METER CALIBRATION FACTOR: 1.000

Orifice	Standard		Dry		Standard	Dry Gas Meter			Barometric	Time				
						Manometer	Test	Meter						
(Δ H)	Setting	Meter	Meter	Meter	Meter	(T _{di})	(T _{do})	(T _d)	(P _b)	(Time)	Y _i	ΔH@i	Q _m	K _m
In. H ₂ O	Start:	(V _w)	Start:	(V _d)	(T _w)	(T _{di})	(T _{do})	(T _d)	(P _b)	(Time)	Y _i	ΔH@i	Q _m	K _m
	End:	ft ³	End:	ft ³	°F	°F	°F	°F	in. of Hg	min.				
0.50	618.298	6.060	232.588	6.021	51.0	54.0	52.5	53.3	29.43	15.00	1.01	1.728	0.401	0.731
	624.358		238.609											
1.00	624.358	5.764	238.609	5.700	50.5	58.0	54.5	56.3	29.43	10.00	1.02	1.727	0.568	0.732
	630.122		244.309											
2.00	630.122	6.284	244.309	6.229	50.0	61.5	56.0	58.8	29.43	8.00	1.02	1.863	0.774	0.704
	636.406		250.538											
3.00	636.406	5.888	250.538	5.874	50.0	64.5	57.5	61.0	29.43	6.00	1.02	1.778	0.972	0.721
	642.294		256.412											
4.00	642.294	5.594	256.412	5.570	50.0	66.5	59.0	62.8	29.43	5.00	1.02	1.838	1.106	0.709
	647.888		261.982											

124

Average: 1.02 1.79

FORMULAS

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

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

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

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

Catalyst Air Management, Inc.

POST-TEST METER BOX CALIBRATION

METER BOX NUMBER: 013
 DATE: 2/16/2010
 CALIBRATED BY: Urban
 BENCH METER CALIBRATION FACTOR: 1.000

PRETEST Y_i : 1.02
 POST-TEST Y_i : 1.01
 DIFFERENCE, %: -0.50

Orifice	Standard		Dry		Standard	Dry Gas Meter								
Manometer	Test		Gas		Test				Barometric					
Setting	Meter		Meter		Meter	Inlet	Outlet	Average	Pressure	Time				
(ΔH)	Start:	(V_w)	Start:	(V_d)	(T_w)	(T_{di})	(T_{do})	(T_d)	(P_b)	(Time)				
In. H ₂ O	End:	ft ³	End:	ft ³	°F	°F	°F	°F	in. of Hg	min.	Y_i	$\Delta H@i$	Q_m	K_m
0.75	795.772	5.006	355.548	5.039	51.0	53.5	53.0	53.3	29.19	10.00	1.00	1.66	0.504	0.747
	800.778		360.587											
0.75	800.778	5.028	360.587	4.903	51.0	55.0	53.5	54.3	29.19	10.00	1.03	1.75	0.490	0.726
	805.806		365.490											
0.75	805.806	5.009	365.490	4.991	51.0	56.5	54.5	55.5	29.19	10.00	1.01	1.70	0.498	0.738
	810.815		370.481											

Average: 1.01 1.70

FORMULAS

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

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

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

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

125

Catalyst Air Management, Inc.

POST-TEST METER BOX CALIBRATION

METER BOX NUMBER: 013
 DATE: 2/16/2010
 CALIBRATED BY: Urban
 BENCH METER CALIBRATION FACTOR: 1.000

PRETEST Y_i : 1.02
 POST-TEST Y_i : 1.01
 DIFFERENCE, %: -0.56

Orifice Manometer Setting (ΔH) In. H ₂ O	Standard Test Meter Start: End:	(V _w) ft ³	Dry Gas Meter Start: End:	(V _d) ft ³	Standard Test Meter Start: End:	Dry Gas Meter			Barometric Pressure (P _b) in. of Hg	Time (Time) min.	Y _i	$\Delta H@i$	Q _m	K _m
						Inlet (T _{di}) °F	Outlet (T _{do}) °F	Average (T _d) °F						
1.50	810.815 817.846	7.031	370.481 377.470	6.989	52.0	57.0	57.0	57.0	29.19	10.00	1.01	1.73	0.699	0.730
1.50	817.846 824.967	7.121	377.470 384.572	7.102	52.0	58.0	57.0	57.5	29.19	10.00	1.01	1.68	0.710	0.741
1.50	824.967 832.103	7.136	384.572 391.675	7.103	52.0	59.5	57.0	58.3	29.19	10.00	1.01	1.69	0.709	0.740

Average: 1.01 1.70

FORMULAS

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

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

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

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

128

CATALYST AIR MANAGEMENT, INC.

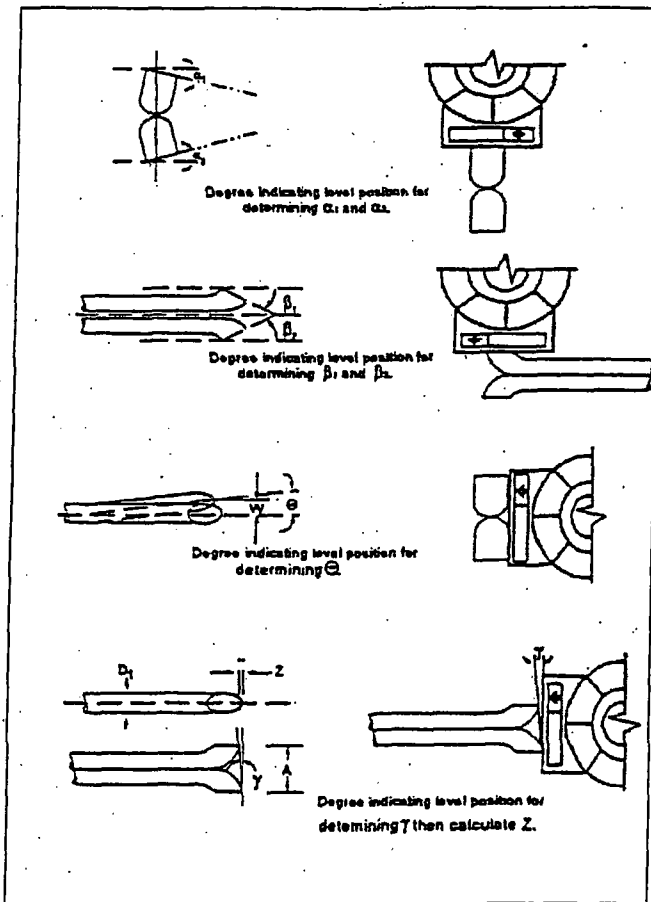
Air Quality Testing Services

2505 Byington-Solway Road
Knoxville, TN 37931

(865) 531-0075

(865) 531-0750 Fax

"S" TYPE PITOT TUBE CALIBRATION - INSPECTION



ATTRIBUTE

Level and Perpendicular?	Yes
Obstructed?	No
Damaged?	No
α_1 ($-10^\circ \leq \alpha_1 \leq +10^\circ$)	0°
α_2 ($-10^\circ \leq \alpha_2 \leq +10^\circ$)	0°
β_1 ($-5^\circ \leq \beta_1 \leq +5^\circ$)	1°
β_2 ($-5^\circ \leq \beta_2 \leq +5^\circ$)	2°
γ	0°
θ	0°
$Z = A \tan \gamma$ ($\leq 0.125"$)	0
$W = A \tan \theta$ ($\leq 0.03125"$)	0
D_1 ($3/16" \leq D_1 \leq 3/8"$)	.370
A	1.10
$A/2D_1$ ($1.05 \leq P_A/D_1 \leq 1.5$)	1.486

QA / QC Check

Completeness Legibility Accuracy Specifications Reasonableness

Certification:

I certify that the Type "S" pitot tube / probe, ID# CAN 210 meets or exceeds all specifications criteria and or applicable design features and is hereby assigned a pitot tube calibration factor of C_p of 0.84

Certified By: [Signature] 5/1/09 Personnel (Signature / Date) Team Leader: [Signature] 2/19/10 Team Leader (Signature / Date)

CATALYST AIR MANAGEMENT, INC.

Barometer Calibration Check
Lakeland Electric

DATE: 1/22/2010
CALIBRATED BY: Kelly

Hg in glass Barometer (in Hg)	29.65
Field Barometer (in Hg)	29.63
Difference	-0.02

CATALYST AIR MANAGEMENT, INC.

NOZZLE CALIBRATION SHEET

Client: *Lakeland Electric*
Job No: *138-152*

Nozzle No. *CAM 200*

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
<i>0.185</i>	<i>0.185</i>	<i>0.185</i>	<i>0.185</i>

Nozzle No. _____

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
------------	------------	------------	------------

Nozzle No. _____

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
------------	------------	------------	------------

Nozzle No. _____

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
------------	------------	------------	------------

Nozzle No. _____

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
------------	------------	------------	------------

Nozzle No. _____

<u>1ST</u>	<u>2ND</u>	<u>3RD</u>	<u>AVG</u>
------------	------------	------------	------------

Calibrated By: *R. Demers*
Date: *2-10-10*

CATALYST AIR MANAGEMENT, INC

K-TYPE THERMOCOUPLE CALIBRATION

DATE: 2/16/2010
CALIBRATED BY: Kelly

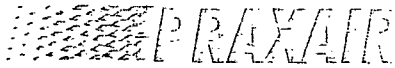
Post Test Calibration Check
Lakeland Electric - McIntosh 3

AVG STACK TEMPERATURE: 138

Thermocouple No: CAM 20

Std Therometer	133
<u>Thermocouple</u>	<u>135</u>
Difference	2
Difference % Absolute	-0.3
Acceptance Criteria %	1.5

Calibration Gas Certification Sheets



CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PDI WHSE KNOXVILLE HUB
3020 E INDUSTRIAL PKWY
KNOXVILLE TN 37921

DocNumber: 0000009807
Order Number: 190671600 - 5
Customer P. O. Number:
Customer Reference Number: LB216

Fill Date: 9/21/2009
Part Number: EV NICDOXE54-AS
Lot Number: NA
Cylinder Style & Outlet: AS 590
Cylinder Pressure & Volume: 2000 psi 140 cu ft
Customer Order Number: NA

Certified Concentration:

Expiration Date:	9/28/2012		
Cylinder Number:	CC65519		Analytical Uncertainty:
10.19	%	CARBON DIOXIDE	± 1 %
12.43	%	OXYGEN	± 1 %
Balance		NITROGEN	

NOx ppm = NA (NOx Values for Reference Only)

Certification Information: Certification Date: 9/28/2009 Term: 36 Months Expiration Date: 9/28/2012

- This cylinder was certified according to the 1997 EPA Traceability Protocol, document #EPA-600/R-97/121, using procedure G1
- Do not use this standard if pressure is less than 150 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: CARBON DIOXIDE

Requested Concentration: 10 %
Certified Concentration: 10.19 %
Instrument Used: SIEMENS ULTRAMAT 5E SN: D2-412
Analytical Method: NON-DISPERSIVE INFRARED
Last Multipoint Calibration: 9/15/2009

Reference Standard Type: GMS
Ref. Std. Cylinder #: CC247549
Ref. Std. Conc: 11.84 %
Ref. Std. Traceable to SRM #: 2745

First Analysis Data:		Date: 9/25/2009	
Z:	0	R:	11.51
C:	9.9	Conc:	10.18
R:	11.51	Z:	0
C:	9.91	Conc:	10.19
Z:	0	R:	11.51
C:	9.91	Conc:	10.19
UOM:	%	Mean Test Assay:	10.19 %

Second Analysis Data:		Date:	
Z:	0	R:	0
C:	0	Conc:	0
R:	0	Z:	0
C:	0	Conc:	0
Z:	0	R:	0
C:	0	Conc:	0
UOM:	%	Mean Test Assay:	0 %

2. Component: OXYGEN

Requested Concentration: 12.5 %
Certified Concentration: 12.43 %
Instrument Used: SIEMENS OXYMAT 5E S/N F1-111
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 9/3/2009

Reference Standard Type: GMS
Ref. Std. Cylinder #: CC154663
Ref. Std. Conc: 22.98 %
Ref. Std. Traceable to SRM #: 2659a

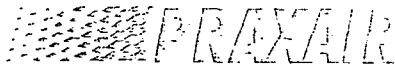
First Analysis Data:		Date: 9/28/2009	
Z:	0	R:	22.98
C:	12.44	Conc:	12.43
R:	23	Z:	0
C:	12.44	Conc:	12.43
Z:	0	R:	23
C:	12.44	Conc:	12.43
UOM:	%	Mean Test Assay:	12.43 %

Second Analysis Data:		Date:	
Z:	0	R:	0
C:	0	Conc:	0
R:	0	Z:	0
C:	0	Conc:	0
Z:	0	R:	0
C:	0	Conc:	0
UOM:	%	Mean Test Assay:	0 %

Analyzed by: Melissa Santana

Certified by: W.M.N. 9/24/09

Information contained herein has been prepared at your request by qualified experts within GTS-Welco, Inc. While we believe that the information is accurate within the limits of the analytical methods employed and is complete to the extent of the specific analyses performed, we make no warranty or representation as to the suitability of the use of the information for any purpose. The information is offered with the understanding that any use of the information is at the sole discretion and risk of the user. In no event shall the liability of GTS-Welco, Inc., arising out of the use of the information contained herein exceed the fee established for providing such information.



CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:

PDI WHSE KNOXVILLE HUB
3020 E INDUSTRIAL PKWY
KNOXVILLE TN 37921

DocNumber: 0000009804
Order Number: 190671600 - 6
Customer P. O. Number:
Customer Reference Number: LB216

Fill Date: 9/21/2009
Part Number: EV NICDOXE113AS
Lot Number: NA
Cylinder Style & Outlet: AS 590
Cylinder Pressure & Volume: 2000 psi 140 cu ft
Customer Order Number: NA

Certified Concentration:

Expiration Date:	9/28/2012		
Cylinder Number:	CC219704		Analytical Uncertainty:
16.80	%	CARBON DIOXIDE	± 1 %
21.92	%	OXYGEN	± 1 %
		Balance NITROGEN	

NOx ppm = NA (NOx Values for Reference Only)

Certification Information: Certification Date: 9/28/2009 Term: 35 Months Expiration Date: 9/28/2012

- This cylinder was certified according to the 1997 EPA Traceability Protocol, document #EPA-830/R-97/121, using procedure G1
- Do not use this standard if pressure is less than 150 PSIG.

Analytical Data: (R=Reference Standard, Z=Zero Gas, C=Gas Candidate)

1. Component: CARBON DIOXIDE

Requested Concentration: 17 %
Certified Concentration: 16.8 %
Instrument Used: SIEMENS ULTRAMAT 5E SN: D2-412
Analytical Method: NON-DISPERSIVE INFRARED
Last Multipoint Calibration: 9/15/2009

Reference Standard Type: GMS
Ref. Std. Cylinder #: CC109454
Ref. Std. Conc: 17.82 %
Ref. Std. Traceable to SRM #: 2745

First Analysis Data:		Date: 9/25/2009	
Z: 0	R: 17.22	C: 16.24	Conc: 16.8
R: 17.22	Z: 0	C: 16.24	Conc: 16.8
Z: 0	C: 16.24	R: 17.24	Conc: 16.8
UOM: %	Mean Test Assay:		16.8 %

Second Analysis Data:		Date:	
Z: 0	R: 0	C: 0	Conc: 0
R: 0	Z: 0	C: 0	Conc: 0
Z: 0	C: 0	R: 0	Conc: 0
UOM: %	Mean Test Assay:		0 %

2. Component: OXYGEN

Requested Concentration: 22 %
Certified Concentration: 21.92 %
Instrument Used: SIEMENS OXYMAT 5E SN F1-111
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 9/3/2009

Reference Standard Type: GMS
Ref. Std. Cylinder #: CC154663
Ref. Std. Conc: 22.98 %
Ref. Std. Traceable to SRM #: 2659a

First Analysis Data:		Date: 9/28/2009	
Z: 0	R: 22.98	C: 21.92	Conc: 21.91
R: 22.98	Z: 0	C: 21.92	Conc: 21.91
Z: 0	C: 21.94	R: 23	Conc: 21.93
UOM: %	Mean Test Assay:		21.92 %

Second Analysis Data:		Date:	
Z: 0	R: 0	C: 0	Conc: 0
R: 0	Z: 0	C: 0	Conc: 0
Z: 0	C: 0	R: 0	Conc: 0
UOM: %	Mean Test Assay:		0 %

Analyzed by: Melissa Santana

Certified by: W.A. 9/29/09

Information contained herein has been prepared at your request by qualified experts within GTS-Welco, Inc. While we believe that the information is accurate within the limits of the analytical methods employed and is complete to the extent of the specific analyses performed, we make no warranty or representation as to the suitability of the use of the information for any purpose. The information is offered with the understanding that any use of the information is at the sole discretion and risk of the user. In no event shall the liability of GTS-Welco, Inc., arising out of the use of the information contained herein exceed the fee established for providing such information.

APPENDIX 6
SAMPLE CALCULATIONS

**SAMPLE EQUATIONS
FOR ISOKINETIC SAMPLING**

CALCULATIONS FOR FLUE GAS VOLUME AND ISOKINETIC RATIO

Time	Dry Gas	Pitot	Orifice	Dry Gas		Flue Gas	Stack
	Meter Ft ³	ΔP In. H ₂ O	ΔH In. H ₂ O	Temp. °F In	Out	Static Pressure In. H ₂ O	
T	V _m	Δp	ΔH	TMI	TMO	P _g	t _s

1. D_n = Nozzle Diameter (inches)

1a. A_n = Area of Nozzle (ft²)

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

3. TT = Net Sampling Time (minutes)

4. V_m = V_m Final - V_m Initial = Sample Gas Volume (Ft³)

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

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

6. Δp = Velocity head of stack gas (in. H₂O)

7. ΔH = Average Orifice Pressure Drop (in. H₂O)

8. Volume of dry gas sampled at standard conditions^a (DSCF)

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

9. V_{lc} = Total Water Collected = gm H₂O Silica gel + ml Imp. H₂O = ml

10. Volume of water vapor at standard conditions^b (SCF)

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

11. Percent moisture in flue gas

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

12. Mole fraction of water vapor in flue gas

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

13. Molecular Weight of dry flue gas

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

- 13a. %EA = % Excess Air =

$$\frac{[(\%O_2) - 0.5(\%CO)]}{[0.264(\%N_2)] - [(\%O_2) - 0.5(\%CO)]} \times 100$$

14. Molecular weight of wet flue gas

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

15. A = Cross-sectional area of stack (Ft²)

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

16. P_s = Flue gas pressure (in, Hg)

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

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

17. T_s = Absolute stack temperature (°R)

$$T_s = 460 + t_s$$

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

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

C_p = pitot tube coefficient

K_p = pitot tube constant = 85.49ft/sec

19. Flue gas volumetric flow rate at standard conditions^b (SCFM)

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

20. Flue gas volumetric flow rate at standard conditions^c (DSCFM)

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

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

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

22. Percent Isokinetic

$$\%I = \frac{K_4(T_s)(V_{m(std)})}{P_s V_s A_n \Theta (1 - B_{ws})}$$

$K_4 = 0.09450$

$\Theta = \text{time}(\text{min})$

- NOTES:
- ^aDry standard cubic feet at 68°F, 29.92 in. Hg
 - ^bStandard conditions at 68°F, 29.92 in. Hg
 - ^cDry standard cubic feet per minute at 68°F, 29.92 in. Hg

II. Calculations for emission rates (Ammonia)

23. Volume of gas sample, standard conditions, L, $V_{m_{std}}$

$$V_{m_{std}} L = 28.316 * (V_{m_{std}})$$

24. Volume of ammonia gas, L

$$V_a = (N * (0.25) * (24.04)) / ((1000) * (18))$$

V_a = Volume of ammonia in the sample of gas

N = Sum of concentrations of ammonium ion, mg/l

0.25 = Conversion factor for 250 ml sample

24.04 = Liters of ideal gas per mole

1/1000 = Conversion factor for mg/l to g/l

18 = Weight of ammonium ion

25. Concentration ammonia (ppm), C_{NH_3}

$$C_{NH_3} = (V_a / V_{m_{std}}) * 10^6$$

III. Calculations for concentration and emission rates

36. SO₂/H₂SO₄ (gr/DSCF)

$$gr / DSCF = 0.01543 \left(\frac{mg}{V_{m(std)}} \right)$$

37. SO₂/H₂SO₄ at stack conditions (gr/ACF)

$$gr / ACF = \frac{17.64 gr / DSCF (P_s) (M_d)}{(T_s + 460)}$$

38. SO₂/H₂SO₄ (lbs/hr), concentration method

$$lbs / hr = 0.00857 * gr / DSCF * Q_{sd}$$

39. SO₂/H₂SO₄ (lbs/mmBtu)

$$\frac{lbs / hr}{10^6 Btu / hr}$$

40. SO₂/H₂SO₄ (lbs/ton)

$$lbs / ton = \frac{lbs / hr}{tons / hr}$$

41. SO₂/H₂SO₄ (lbs/mmBtu), F-Factor Method

$$\text{Using } O_2 = \frac{(0.01543)(mg)(F - Factor)(20.9)}{(7000)(V_{m(std)})(20.9 - \%O_2)}$$

42. SO₂/H₂SO₄ (lbs/mmBtu), F-Factor Method (Continued)

$$\text{Using } CO_2 = \frac{(0.01543)(mg)(F - Factor)(100)}{(7000)(V_{m(std)})(\%CO_2)}$$

Ra 1 NH3

CALCULATION QUALITY ASSURANCE CHECK

$$V_{mstd} = \frac{(17.64)(1.02)(38.437)(29.85 + \frac{1.633}{13.6})}{(55 + 460)} = 40.232$$

$$V_w = 0.0471(84.3) = 3.9705$$

$$\%M = 100(3.9705) / (3.9705 + 40.232) = 8.98$$

$$B_{ws} = 8.98 / 100 = 0.0898$$

$$M_d = 0.44(11.8) + 0.32(6.6) + 0.28(100 - 6.6 - 11.8) = 30.15$$

$$M_s = 30.15(1 - 0.0898) + 12(0.0898) = 29.06$$

$$P_s = 29.85 + (-0.63/13.6) = 29.80$$

$$T_s = 460 + 137 = 597$$

$$V_s = (0.84)(85.49)(1.196) \sqrt{\frac{597}{(29.06)(29.80)}} = 71.3$$

$$Q_{std} = (71.3)(60)(271.8)(1 - 0.0898) \left(\frac{528}{597}\right) \left(\frac{29.80}{29.92}\right) = 932755$$

$$\%I = \frac{(0.09450)(597)(40.232)}{(1 - 0.0898)(60)(29.80)(71.3)(1.867 \times 10^{-4})} = 104.7$$

$$C_{pnd}/I_{p1} = \left(\frac{154}{300}\right)(0.30)(24.04) / 18000 = 2.00 \times 10^{-5}$$

$$I_{p2/3} = \left(\frac{13}{250}\right)(0.25)(24.04) / 18000 = 1.74 \times 10^{-5}$$

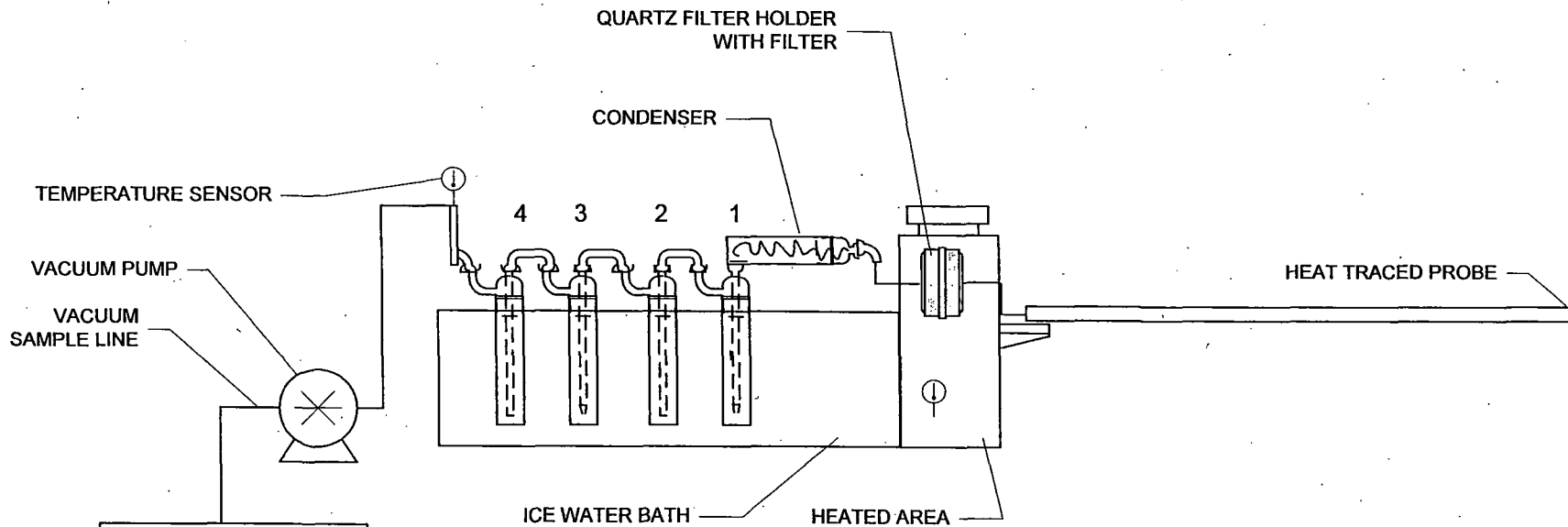
$$ppm_{pnd}/I_{p1} = \left[\frac{(2.00 \times 10^{-5})}{(40.232)(28316)} \right] 10^6 = 0.02$$

$$I_{p2/3} = \left[\frac{(1.74 \times 10^{-5})}{(40.232)(28316)} \right] 10^6 = 0.02$$

$$total = \left[\frac{(2.00 \times 10^{-5}) + (1.74 \times 10^{-5})}{(40.232)(28316)} \right] 10^6 = 0.03$$

$$total \text{ @ } 3\% O_2 = 0.03 \left(\frac{17.9}{(20.9 - 6.6)} \right) = 0.04$$

APPENDIX 7
FIGURES

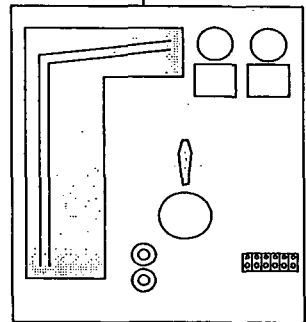


NOTE:

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

***IMPINGER CONTENTS**

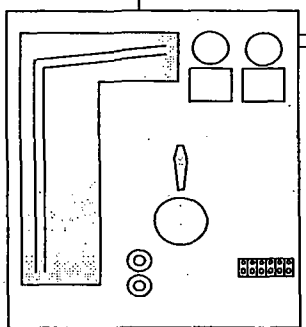
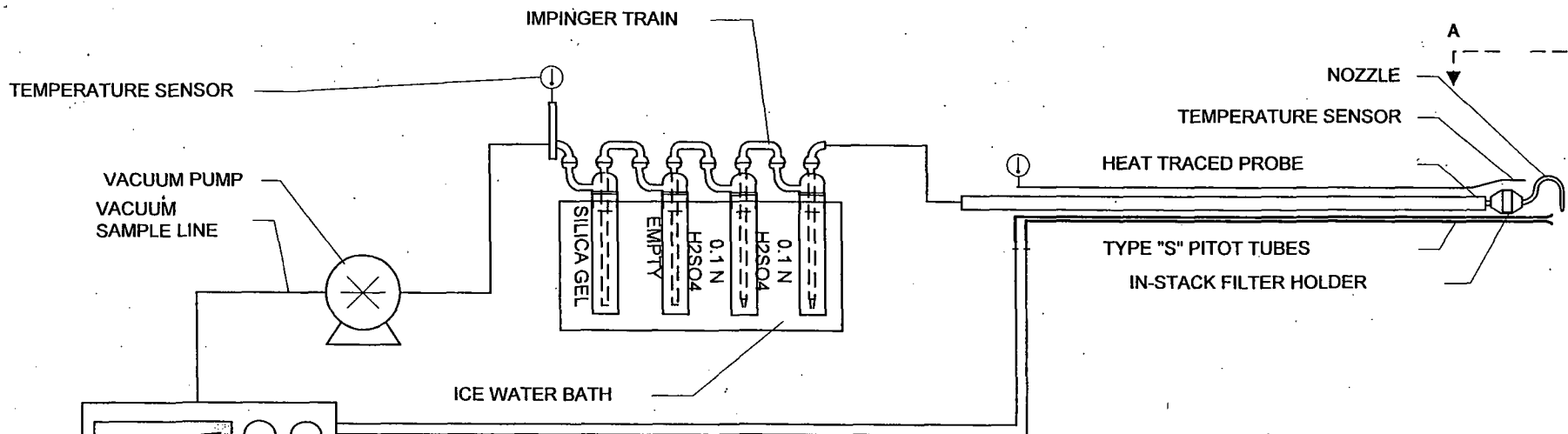
- Condenser Coil
- 1 3% H2O2 - 100ml
 - 2 3% H2O2 - 100mi
 - 3 DI Water - 100ml
 - 4 Silical Gel



GAS SAMPLING METER BOX

TITLE		
EPA METHOD 8A SAMPLE TRAIN		
DESCRIPTION		DATE
ACID MIST SO3 SAMPLING TRAIN		6-10-06
SCALE	DRAWN BY	REVISED
NONE	MJ Taylor	

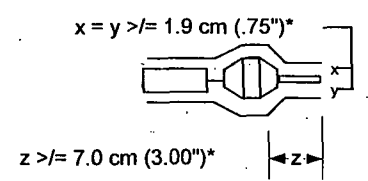
142



GAS SAMPLING METER BOX

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

- *IMPINGER CONTENTS**
 1 100 ml 0.1 H₂SO₄
 2 100 ml 0.1 H₂SO₄
 3 Empty
 4 250 g Silica Gel



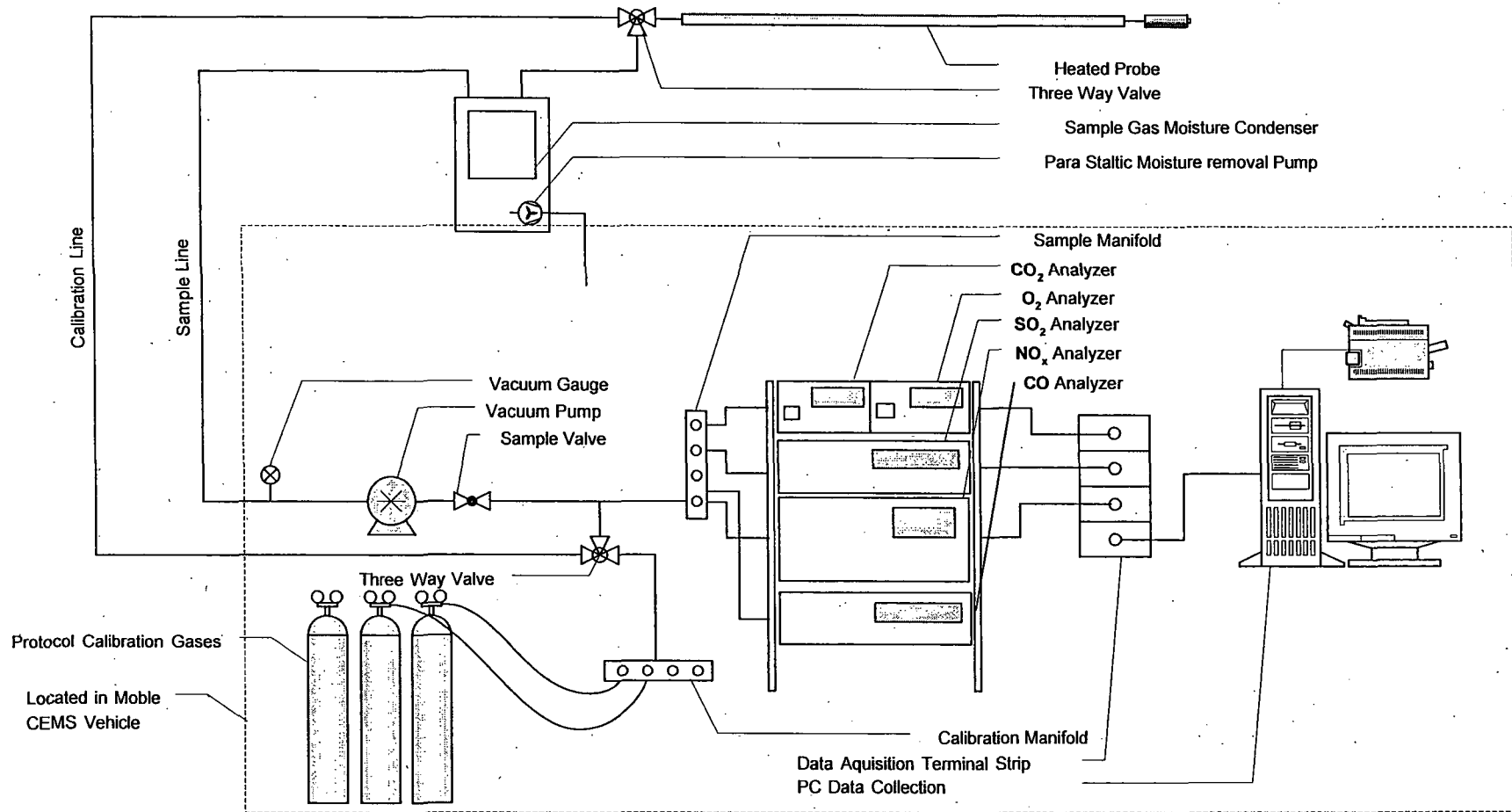
* Suggested (Interference free) spacing

Section A-A
 Scale: NONE

TITLE EPA METHOD 027 SAMPLING TRAIN		
DESCRIPTION AMMONIA SAMPLE TRAIN		DATE 07-05-99
SCALE NONE	DRAWN BY MJ Taylor	REVISED

143

144

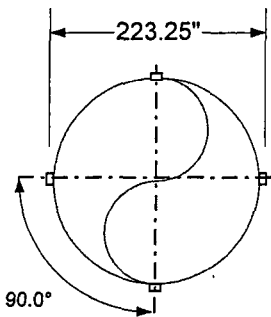


TITLE EPA INSTRUMENTAL SAMPLE TRAIN		
DESCRIPTION SAMPLE TRAIN SCHEMATIC		DATE 01-26-98
SCALE NONE	DRAWN BY RF COBB	REVISED

Unit 3 Stack Height = 275'-0"

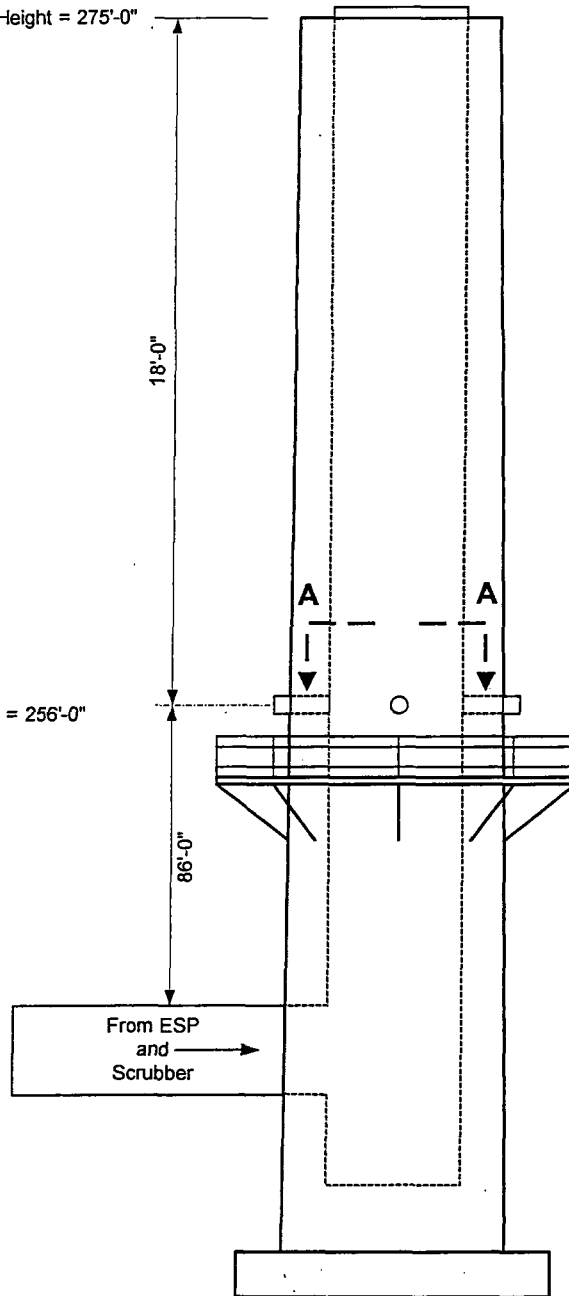
TRAVERSE POINTS (Typ 4 Ports)
(Inches) from inside of stack.

1. $4.69" + 48" = 52.69"$
2. $14.96" + 48" = 62.96"$
3. $26.34" + 48" = 74.34"$
4. $39.52" + 48" = 87.52"$
5. $55.81" + 48" = 103.81"$
6. $79.48" + 48" = 127.48"$



SECTION A - A

Port Height = 256'-0"



TITLE		
LAKELAND ELECTRIC - C.D. McINTOSH POWER PLANT		
DESCRIPTION		DATE
UNIT NO. 3 STACK TEST PORT CONFIGURATION		1/2/99
SCALE	DRAWN BY	REVISED
NONE	MJ TAYLOR	7/11/05