LAKELAND ELECTRIC

Farzie Shelton, ChE; REM

Associate GM Technical Support

SENT VIA FEDEX

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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 NH_3 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

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

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, 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.

   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

Tom Trickey
Signature

3-26-10
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

CATALYST

AIR MANAGEMENT, INC.

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

2505 Byington-Solway Road
Knoxville, TN 37931
(865) 531-0075 • Fax (865) 531-0750

29541 Morningmist Drive
Wesley Chapel, FL 33543
(813) 994-5880 • Fax (813) 994-5571

10 Mill Road
Morgantown, PA 19543
(610) 913-7600 • Fax (610) 913-7608

CATALYST
AIR MANAGEMENT, INC.

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

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

CATALYST
AIR MANAGEMENT, INC.

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

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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:

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% O_2	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 SO_3 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 H2O):	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
%CO2 - Carbon Dioxide, Dry:	13.3	13.2	13.1	13.2
%O2 - 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% O2 - 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%O2 **0.989**		Average ppm @ 3%O2 **1.268**	
	Average lb/mmBtu **0.001**		Average ppm @ 3%O2 **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 H2O):	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
%CO2 - Carbon Dioxide, Dry:	12.9	13.5	12.8
%O2 - 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% O2 - 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 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):	29.487	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
%CO2 - Carbon Dioxide, Dry:	10.9	10.8	11.0	10.7	10.8
%O2 - 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% O2 - 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 SO_2 emissions. Low NOx burners are used to control NOx 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 SO_2, NOx and CO_2 concentrations and flow at the sampling location. The CEMS analyzers include a Thermo Environmental model 42i NOx monitor, a Thermo Environmental model 43i SO_2 monitor, a Thermo Environmental model 410i CO_2 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 handing system (DAHS).

Unit 3 CEMS

(1) TECO NOx - 42i-0608716016
(1) TECO SO_2 - 43i-06087106018
(1) TECO CO_2 - 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 NOx 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 CO2, O2, 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 SO_3, 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 Grahm 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 H_2O
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 SO_3/H_2SO_4 analysis. The peroxide and deionized H_2O impingers' contents were recovered and the impingers and connecting glassware were rinsed with distilled water and were retained, however SO_2 analysis was not performed. Each sample was analyzed by barium thorin titration to determine SO_3/H_2SO_4 concentrations.

6.3 O_2 and CO_2 – EPA Method 3A

The O_2 and CO_2 concentrations were determined simultaneously with each of the test runs. A sample was continuously extracted and introduced into a Telgan O_2/CO_2 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 SO_3 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 SO_3 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 NH_3 testing was performed February 10, 2010 at 365 MW with the SCR in service.

APPENDIX 1
TEST RESULTS – NH_3

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_{lc}
GAS METER Y-FACTOR:	1.02	Y	PITOT COEFFICIENT:	0.84	C_p

POINT	TIME	GAS METER	VEL HEAD	PM ORIFICE	METER TEMP IN	METER 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
RESULTS	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_s =	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 IN	METER TEMP OUT	STACK TEMP	CO2%	O2%	STATIC PRESS	SDE	VEL
		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
RESULTS	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	$V_{w(std)}$ =	3.792	%M=	8.58	
B_{ws} =	0.086	M_d =	30.15	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/mmBtu
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_{lc}
GAS METER Y-FACTOR:	1.02	Y	PITOT COEFFICIENT:	0.84	C_p

POINT	TIME	GAS METER	VEL HEAD	PM ORIFICE	METER TEMP IN	METER 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
RESULTS	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	$V_{m(std)}$ =	38.714	$V_{w(std)}$ =	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. (865) 531-0075
Air Quality Testing Services (865) 531-0750 Fax
2505 Byington-Solway Road
Knoxville, TN 37931

Field Isokinetic Data Sheet

Client	Lakeland	Pitot No.	CAM-110	Filter Number	N/A
Plant	McIntosh	Nozzle No.	200	Initial Leak (Samp.)	0.010@9"
Location	Stack U3	Nozzle Dn.	.185	Initial Leak (Pitot)	+OK@6"
Test	CTM 027	TC No.	16		-OK@7"
Run	1	P_B	29.85		
Date	2/10/10	Ambient Temp	63°F	Final Leak (Samp.)	0.008@8"
Meter Box	013	Static	-.6"	Final Leak (Pitot)	+ OK@6.5"
Δ H	1.79 | Y_1 1.02				- OK@7"

K=0.97

POINT	TIME ACTUAL	TIME RUN	METER	ΔP	Δh	STACK °F	PROBE° F	OVEN °F	METER °F IN	METER °F OUT	EXIT °F	VAC
i	1150	0	238.306					N/A				
A 1		2.5	240.0	1.6	1.5	136	141		50	53	57	4.5
2		5	241.7	1.6	1.5	138	141		52	52	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	53	4.5
5		12.5	246.7	1.5	1.4	137	141		53	53	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	259.3	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 O_2 - 6.4 CO_2 - 11.8
B O_2 - 6.6 CO_2 - 11.8
C O_2 - 6.5 CO_2 - 11.7
D O_2 - 6.6 CO_2 - 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: 3/1027 AMB. TEMP (°F) 63
TECHNICIAN: Urban / Lowe

Run 1
NH3

RUN / GAS	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO_2							11.8		
O_2 (NET IS ACTUAL MINUS ACTUAL CO_2)							6.6	Fuel Type: COAL / RESIDUAL FUEL OIL / NATURAL GAS	Fo (calc): 1.280 / 1.716

SYSTEM LEAK CHECK ok NA moisture
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)	840.7	738.3	757.2				855.6	
INITIAL (ml)	803.4	722.2	746.6				836.0	
NET (ml)	37.3	16.6	10.6				19.8	84.3
TOTALS								84.3

PARTICULATE CATCH

FILTER WEIGHTS

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

PROBE/NOZZLE WASH

BEAKER NO.				WEIGHED BY
FINAL WEIGHT				
INITIAL WEIGHT				
DIFFERENCE				
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	Pitot No.	CAM-110	Filter Number	N/A
Plant	McIntosh	Nozzle No.	.200	Initial Leak (Samp.)	0.010@9"
Location	Stack U3	Nozzle Dn.	.185	Initial Leak (Pitot)	+ ok@6.5"
Test	CTM 027	TC No.	16		- ok@7"
Run	2	P_B	29.85		
Date	2/10/10	Ambient Temp	60°F	Final Leak (Samp.)	0.010@10"
Meter Box	613	Static	-.6"	Final Leak (Pitot)	+ ok@5.5"
ΔH	1.79 | Y_i 1.02				- ok@5.5"

K-092

POINT	TIME ACTUAL	TIME RUN	METER	ΔP	Δh	STACK °F	PROBE° F	OVEN °F	METER °F IN	METER °F OUT	EXIT °F	VAC
	1318	0	277.283					N/A				
A1		2.5	279.0	1.6	1.5	135	138		59	58	58	3.5
2		5	280.7	1.5	1.4	138	142		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	287.137	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									
D1		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	1.6	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) O_2 - 6.7 CO_2 - 11.5 B) O_2 - 6.7 CO_2 - 11.8 C) O_2 - 6.6 CO_2 - 12.0 D) O_2 - 6.8 CO_2 - 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) 1318 - 1426
SAMPLING LOCATION: 3 Stack
SAMPLING TYPE: Integrated Bag
ANALYTICAL METHOD: 3/0/7 AMB. TEMP (°F) 63
TECHNICIAN: Urban / Lou

Run 2
NH_3

RUN / GAS	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO_2							11.3		
O_2 (NET IS ACTUAL MINUS ACTUAL CO_2)							6.7	Fuel Type: COAL / RESIDUAL FUEL OIL / NATURAL GAS	Fo (calc): 1.280 / 1.716

SYSTEM LEAK CHECK ok NA instrument
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)	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

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

PROBE/NOZZLE WASH

BEAKER NO.				WEIGHED BY
FINAL WEIGHT				
INITIAL WEIGHT				
DIFFERENCE				
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	Pitot No.	CAM-110	Filter Number	N/A
Plant	McIntosh	Nozzle No.	200	Initial Leak (Samp.)	0.010@9"
Location	Stack U-3	Nozzle Dn.	.185	Initial Leak (Pitot)	+ OK@5.5"
Test	CTM-027	TC No.	16		- OK@5.5"
Run	3	P_B	29.85		
Date	2/10/10	Ambient Temp	62°F	Final Leak (Samp.)	0.008@9"
Meter Box	013	Static	-.6"	Final Leak (Pitot)	+ OK@6"
ΔH	1.79	Y_i 1.02			- OK@5"

K = 0.92

POINT	TIME ACTUAL	RUN	METER	ΔP	Δh	STACK °F	PROBE° F	OVEN °F	METER °F IN	METER °F OUT	EXIT °F	VAC
	1443	0	316.601					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	345.447	1.3	1.2	136	141		66	63	51	2.5
	1540		345.447									
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) O_2 - 6.8 B) O_2 - 6.7 C) O_2 - 6.7 D) O_2 - 6.7
CO_2 - 12.0 CO_2 - 11.7 CO_2 - 11.8 CO_2 - 11.7

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) 1443 - 1555
SAMPLING LOCATION: 3 Stack
SAMPLING TYPE: Integrated Bag
ANALYTICAL METHOD: 3/D27 AMB. TEMP (°F) 62
TECHNICIAN: Mabel Lee

Run 3
NH_3

GAS \ RUN	1		2		3		AVERAGE NET VOLUME	Fo (TEST) = $\frac{20.9 - \%O_2}{\%CO2}$	
	ACTUAL READING	NET	ACTUAL READING	NET	ACTUAL READING	NET			
CO_2							11.3		
O_2 (NET IS ACTUAL MINUS ACTUAL CO_2)							6.7	Fuel Type: COAL / RESIDUAL FUEL OIL / NATURAL GAS	Fo (calc): 1.280 / 1.716

SYSTEM LEAK CHECK ok NA instrument
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				398.4	
INITIAL (ml)	750.6	759.9	747.6				382.3	
NET (ml)	39.6	17.0	11.9				16.1	84.6
TOTALS								84.6

PARTICULATE CATCH

FILTER WEIGHTS

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

PROBE/NOZZLE WASH

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

TOTAL PARTICULATE CATCH (mg) _____

APPENDIX 2
TEST RESULTS – SO_3

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			
RESULTS	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			
RESULTS	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 TEMP IN	METER 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			
RESULTS	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 TEMP IN	METER 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			
RESULTS	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_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER 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			
RESULTS	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 METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		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			
RESULTS	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	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		732.573									
	10.0	737.4	0.75	69	68	354	495	181			
	10.0	742.3	0.75	70	68	355	502	182	11.5	6.7	-0.50
	10.0	747.2	0.75	71	69	350	500	177			
	10.0	752.0	0.75	71	68	354	508	178			
	10.0	756.7	0.75	72	69	351	497	185			
	10.0	761.592	0.75	71	69	354	506	176			
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	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		762.031									
	10.0	766.9	0.75	67	66	351	511	176			
	10.0	771.7	0.75	66	65	353	497	180	11.7	6.7	-0.50
	10.0	776.6	0.75	66	65	351	502	181			
	10.0	781.4	0.75	67	65	349	502	174			
	10.0	786.1	0.75	67	64	352	505	177			
	10.0	790.984	0.75	68	65	350	497	182			
RESULTS	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: 10 Date: 2/3/10 Start Time: 8:45
End Time: 9:45

BAROMETRIC PRESSURE: 29.99 P_{bar} VOLUME OF MOISTURE: 104 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		791.490									
	10.0	796.2	0.75	58	57	351	499	181			
	10.0	801.0	0.75	59	57	352	502	180	12.9	6.7	-0.60
	10.0	805.8	0.75	60	58	355	503	176			
	10.0	810.6	0.75	61	58	354	504	178			
	10.0	815.4	0.75	63	59	35	500	180			
	10.0	820.228	0.75	64	60	351	499	179			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	28.738	0.750		60				12.9	6.7	-0.60
	net	net	avg		avg				avg	avg	avg

P_s= 29.95 $V_{m(std)}$= 29.905 $V_{w(std)}$= 4.898 %M= 14.07
B_{ws}= 0.141 M_d= 30.33 M_s= 28.60

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.918	1.157	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: **11** Date: 2/3/10 Start Time: 12:55
End Time: 13:55

BAROMETRIC PRESSURE: 29.99 P_{bar} VOLUME OF MOISTURE: 101 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		821.063									
	10.0	825.8	0.75	62	61	349	501	175			
	10.0	830.7	0.75	63	62	358	505	174	13.5	5.8	-0.60
	10.0	835.4	0.75	63	62	353	497	177			
	10.0	840.2	0.75	65	63	349	502	175			
	10.0	845.0	0.75	66	64	354	496	176			
	10.0	849.945	0.75	67	65	357	496	177			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	*28.882*	*0.750*		*64*				*13.5*	*5.8*	*-0.60*
	net	net	avg		avg				avg	avg	avg

P_s= 29.95 $V_{m(std)}$= 29.820 $V_{w(std)}$= 4.757 %M= 13.76
B_{ws}= 0.138 M_d= 30.39 M_s= 28.69

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	1.000	1.185	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: **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	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		850.529									
	10.0	855.3	0.75	66	66	346	508	174			
	10.0	860.1	0.75	66	66	347	503	183	12.8	6.7	-0.65
	10.0	865.0	0.75	66	66	346	502	184			
	10.0	869.8	0.75	66	65	351	501	176			
	10.0	874.6	0.75	66	65	352	498	174			
	10.0	879.405	0.75	67	65	348	506	180			
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 IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		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: **14** Date: 2/8/10 Start Time: 10:20 End Time: 11:20

BAROMETRIC PRESSURE: 29.90 P_{bar} VOLUME OF MOISTURE: 80 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		939.638									
	10.0	944.4	0.75	59	58	351	507	176			
	10.0	949.2	0.75	62	59	355	500	186	11.5	7.6	-0.50
	10.0	954.1	0.75	64	60	355	501	177			
	10.0	958.9	0.75	65	61	356	507	179			
	10.0	963.7	0.75	67	63	352	500	175			
	10.0	968.540	0.75	68	64	350	507	179			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	28.902	0.750		63				11.5	7.6	-0.50
	net	net	avg		avg				avg	avg	avg

P_s = 29.86 $V_{m(std)}$ = 29.813 $V_{w(std)}$ = 3.768 %M= 11.22
B_{ws} = 0.112 M_d = 30.14 M_s = 28.78

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.397	0.534	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} VOLUME OF MOISTURE: 81 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER 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

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: **16** Date: 2/8/10 Start Time: 15:30 End Time: 16:30

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 IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		0.100									
	10.0	5.0	0.75	72	71	341	508	178			
	10.0	9.8	0.75	73	72	346	497	186	12.0	7.5	-0.50
	10.0	14.7	0.75	74	72	351	504	179			
	10.0	19.6	0.75	75	72	355	496	177			
	10.0	24.4	0.75	76	73	348	506	182			
	10.0	29.348	0.75	78	74	351	503	184			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	29.248	0.750		74				12.0	7.5	-0.50
	net	net	avg		avg				avg	avg	avg

P_s = 29.86 $V_{m(std)}$ = 29.548 $V_{w(std)}$ = 3.580 %M= 10.81
B_{ws} = 0.108 M_d = 30.22 M_s = 28.90

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.475	0.635	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: **17** Date: 2/8/10 Start Time: 17:07
End Time: 18:07

BAROMETRIC PRESSURE: 29.90 P_{bar} VOLUME OF MOISTURE: 74 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER IN	METER OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		30.212									
	10.0	35.0	0.75	76	74	345	503	174			
	10.0	39.9	0.75	78	75	355	497	184	12.1	7.5	-0.50
	10.0	44.8	0.75	80	76	359	499	189			
	10.0	49.8	0.75	80	76	360	496	183			
	10.0	54.7	0.75	80	77	352	504	175			
	10.0	59.621	0.75	80	76	354	503	176			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	29.409	0.750		77				12.1	7.5	-0.50
	net	net	avg		avg				avg	avg	avg

P_s = 29.86 $V_{m(std)}$ = 29.499 $V_{w(std)}$ = 3.485 %M= 10.57
B_{ws} = 0.106 M_d = 30.24 M_s = 28.94

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.455	0.608	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 TEMP IN	METER 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			
RESULTS	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_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		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: **20** Date: 2/9/10 Start Time: 9:55
End Time: 10:55

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 METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		118.923									
	10.0	123.7	0.75	65	63	353	506	174			
	10.0	128.6	0.75	66	64	360	500	175	11.0	8.5	-0.60
	10.0	133.4	0.75	68	65	355	505	176			
	10.0	138.1	0.75	69	66	351	504	177			
	10.0	143.0	0.75	71	67	350	495	177			
	10.0	147.877	0.75	72	68	351	507	177			
RESULTS	TT	VM	PM		TM				CO2	O2	Static
	60.0	28.954	0.750		67				11.0	8.5	-0.60
	net	net	avg		avg				avg	avg	avg

P_s= 29.71 $V_{m(std)}$= 29.464 $V_{w(std)}$= 3.580 %M= 10.83
B_{ws}= 0.108 M_d= 30.10 M_s= 28.79

EMISSIONS

	Concentration (ppm)	Concentration (ppm @ 3% O2)	Emission Rate (lb/mmBtu)
SO3	0.583	0.842	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} VOLUME OF MOISTURE: 75 V_{lc}
GAS METER Y-FACTOR: 1.02 Y PITOT COEFFICIENT: 0.84 C_p

POINT	TIME	GAS METER	PM ORIFICE	METER TEMP IN	METER 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			
RESULTS	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 METER	PM ORIFICE	METER TEMP IN	METER TEMP OUT	PROBE TEMP	OVEN TEMP	COIL TEMP	CO2%	O2%	STATIC PRESS.
		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

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

Run 1		Run 2		Run 3		Run 4	
Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr	Date - Time	Rate lbs/hr
2/1/2010 10:35	0	2/1/2010 13:10	0	2/1/2010 15:43	0	2/1/2010 17:56	0
2/1/2010 10:36	0	2/1/2010 13:11	0	2/1/2010 15:44	0	2/1/2010 17:57	0
2/1/2010 10:37	0	2/1/2010 13:12	0	2/1/2010 15:45	0	2/1/2010 17:58	0
2/1/2010 10:38	0	2/1/2010 13:13	0	2/1/2010 15:46	0	2/1/2010 17:59	0
2/1/2010 10:39	0	2/1/2010 13:14	0	2/1/2010 15:47	0	2/1/2010 18:00	0
2/1/2010 10:40	0	2/1/2010 13:15	0	2/1/2010 15:48	0	2/1/2010 18:01	0
2/1/2010 10:41	0	2/1/2010 13:16	0	2/1/2010 15:49	0	2/1/2010 18:02	0
2/1/2010 10:42	0	2/1/2010 13:17	0	2/1/2010 15:50	0	2/1/2010 18:03	0
2/1/2010 10:43	0	2/1/2010 13:18	0	2/1/2010 15:51	0	2/1/2010 18:04	0
2/1/2010 10:44	0	2/1/2010 13:19	0	2/1/2010 15:52	0	2/1/2010 18:05	0
2/1/2010 10:45	0	2/1/2010 13:20	0	2/1/2010 15:53	0	2/1/2010 18:06	0
2/1/2010 10:46	0	2/1/2010 13:21	0	2/1/2010 15:54	0	2/1/2010 18:07	0
2/1/2010 10:47	0	2/1/2010 13:22	0	2/1/2010 15:55	0	2/1/2010 18:08	0
2/1/2010 10:48	0	2/1/2010 13:23	0	2/1/2010 15:56	0	2/1/2010 18:09	0
2/1/2010 10:49	0	2/1/2010 13:24	0	2/1/2010 15:57	0	2/1/2010 18:10	0
2/1/2010 10:50	0	2/1/2010 13:25	0	2/1/2010 15:58	0	2/1/2010 18:11	0
2/1/2010 10:51	0	2/1/2010 13:26	0	2/1/2010 15:59	0	2/1/2010 18:12	0
2/1/2010 10:52	0	2/1/2010 13:27	0	2/1/2010 16:00	0	2/1/2010 18:13	0
2/1/2010 10:53	0	2/1/2010 13:28	0	2/1/2010 16:01	0	2/1/2010 18:14	0
2/1/2010 10:54	0	2/1/2010 13:29	0	2/1/2010 16:02	0	2/1/2010 18:15	0
2/1/2010 10:55	0	2/1/2010 13:30	0	2/1/2010 16:03	0	2/1/2010 18:16	0
2/1/2010 10:56	0	2/1/2010 13:31	0	2/1/2010 16:04	0	2/1/2010 18:17	0
2/1/2010 10:57	0	2/1/2010 13:32	0	2/1/2010 16:05	0	2/1/2010 18:18	0
2/1/2010 10:58	0	2/1/2010 13:33	0	2/1/2010 16:06	0	2/1/2010 18:19	0
2/1/2010 10:59	0	2/1/2010 13:34	0	2/1/2010 16:07	0	2/1/2010 18:20	0
2/1/2010 11:00	0	2/1/2010 13:35	0	2/1/2010 16:08	0	2/1/2010 18:21	0
2/1/2010 11:01	0	2/1/2010 13:36	0	2/1/2010 16:09	0	2/1/2010 18:22	0
2/1/2010 11:02	0	2/1/2010 13:37	0	2/1/2010 16:10	0	2/1/2010 18:23	0
2/1/2010 11:03	0	2/1/2010 13:38	0	2/1/2010 16:11	0	2/1/2010 18:24	0
2/1/2010 11:04	0	2/1/2010 13:39	0	2/1/2010 16:12	0	2/1/2010 18:25	0
2/1/2010 11:05	0	2/1/2010 13:40	0	2/1/2010 16:13	0	2/1/2010 18:26	0
2/1/2010 11:06	0	2/1/2010 13:41	0	2/1/2010 16:14	0	2/1/2010 18:27	0
2/1/2010 11:07	0	2/1/2010 13:42	0	2/1/2010 16:15	0	2/1/2010 18:28	0
2/1/2010 11:08	0	2/1/2010 13:43	0	2/1/2010 16:16	0	2/1/2010 18:29	0
2/1/2010 11:09	0	2/1/2010 13:44	0	2/1/2010 16:17	0	2/1/2010 18:30	0
2/1/2010 11:10	0	2/1/2010 13:45	0	2/1/2010 16:18	0	2/1/2010 18:31	0
2/1/2010 11:11	0	2/1/2010 13:46	0	2/1/2010 16:19	0	2/1/2010 18:32	0
2/1/2010 11:12	0	2/1/2010 13:47	0	2/1/2010 16:20	0	2/1/2010 18:33	0
2/1/2010 11:13	0	2/1/2010 13:48	0	2/1/2010 16:21	0	2/1/2010 18:34	0
2/1/2010 11:14	0	2/1/2010 13:49	0	2/1/2010 16:22	0	2/1/2010 18:35	0
2/1/2010 11:15	0	2/1/2010 13:50	0	2/1/2010 16:23	0	2/1/2010 18:36	0
2/1/2010 11:16	0	2/1/2010 13:51	0	2/1/2010 16:24	0	2/1/2010 18:37	0
2/1/2010 11:17	0	2/1/2010 13:52	0	2/1/2010 16:25	0	2/1/2010 18:38	0
2/1/2010 11:18	0	2/1/2010 13:53	0	2/1/2010 16:26	0	2/1/2010 18:39	0
2/1/2010 11:19	0	2/1/2010 13:54	0	2/1/2010 16:27	0	2/1/2010 18:40	0
2/1/2010 11:20	0	2/1/2010 13:55	0	2/1/2010 16:28	0	2/1/2010 18:41	0
2/1/2010 11:21	0	2/1/2010 13:56	0	2/1/2010 16:29	0	2/1/2010 18:42	0
2/1/2010 11:22	0	2/1/2010 13:57	0	2/1/2010 16:30	0	2/1/2010 18:43	0
2/1/2010 11:23	0	2/1/2010 13:58	0	2/1/2010 16:31	0	2/1/2010 18:44	0
2/1/2010 11:24	0	2/1/2010 13:59	0	2/1/2010 16:32	0	2/1/2010 18:45	0
2/1/2010 11:25	0	2/1/2010 14:00	0	2/1/2010 16:33	0	2/1/2010 18:46	0
2/1/2010 11:26	0	2/1/2010 14:01	0	2/1/2010 16:34	0	2/1/2010 18:47	0
2/1/2010 11:27	0	2/1/2010 14:02	0	2/1/2010 16:35	0	2/1/2010 18:48	0
2/1/2010 11:28	0	2/1/2010 14:03	0	2/1/2010 16:36	0	2/1/2010 18:49	0
2/1/2010 11:29	0	2/1/2010 14:04	0	2/1/2010 16:37	0	2/1/2010 18:50	0
2/1/2010 11:30	0	2/1/2010 14:05	0	2/1/2010 16:38	0	2/1/2010 18:51	0
2/1/2010 11:31	0	2/1/2010 14:06	0	2/1/2010 16:39	0	2/1/2010 18:52	0
2/1/2010 11:32	0	2/1/2010 14:07	0	2/1/2010 16:40	0	2/1/2010 18:53	0
2/1/2010 11:33	0	2/1/2010 14:08	0	2/1/2010 16:41	0	2/1/2010 18:54	0
2/1/2010 11:34	0	2/1/2010 14:09	0	2/1/2010 16:42	0	2/1/2010 18:55	0
2/1/2010 11:35	0	2/1/2010 14:10	0	2/1/2010 16:43	0	2/1/2010 18:56	0
Average	0	Average	0	Average	0	Average	0

Run 1		Run 2		Run 3		Run 4	
Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value
02/01/2010 10:35		02/01/2010 13:10	0.651	02/01/2010 15:43	0.747	02/01/2010 17:56	0.553
02/01/2010 10:36		02/01/2010 13:11	0.622	02/01/2010 15:44	0.767	02/01/2010 17:57	0.558
02/01/2010 10:37		02/01/2010 13:12	0.584	02/01/2010 15:45	0.729	02/01/2010 17:58	0.580
02/01/2010 10:38		02/01/2010 13:13	0.554	02/01/2010 15:46	0.685	02/01/2010 17:59	0.624
02/01/2010 10:39		02/01/2010 13:14	0.512	02/01/2010 15:47	0.620	02/01/2010 18:00	0.689
02/01/2010 10:40	0.650	02/01/2010 13:15	0.479	02/01/2010 15:48	0.558	02/01/2010 18:01	0.711
02/01/2010 10:41	0.560	02/01/2010 13:16	0.495	02/01/2010 15:49	0.530	02/01/2010 18:02	0.718
02/01/2010 10:42	0.498	02/01/2010 13:17	0.530	02/01/2010 15:50		02/01/2010 18:03	0.682
02/01/2010 10:43	0.497	02/01/2010 13:18	0.560	02/01/2010 15:51		02/01/2010 18:04	0.649
02/01/2010 10:44	0.528	02/01/2010 13:19	0.587	02/01/2010 15:52		02/01/2010 18:05	
02/01/2010 10:45	0.563	02/01/2010 13:20		02/01/2010 15:53		02/01/2010 18:06	
02/01/2010 10:46	0.596	02/01/2010 13:21		02/01/2010 15:54		02/01/2010 18:07	
02/01/2010 10:47	0.627	02/01/2010 13:22		02/01/2010 15:55	0.725	02/01/2010 18:08	
02/01/2010 10:48	0.661	02/01/2010 13:23		02/01/2010 15:56	0.764	02/01/2010 18:09	
02/01/2010 10:49	0.683	02/01/2010 13:24		02/01/2010 15:57	0.778	02/01/2010 18:10	0.634
02/01/2010 10:50		02/01/2010 13:25	0.537	02/01/2010 15:58	0.746	02/01/2010 18:11	0.681
02/01/2010 10:51		02/01/2010 13:26	0.572	02/01/2010 15:59	0.662	02/01/2010 18:12	0.734
02/01/2010 10:52		02/01/2010 13:27	0.552	02/01/2010 16:00	0.587	02/01/2010 18:13	0.767
02/01/2010 10:53		02/01/2010 13:28	0.526	02/01/2010 16:01	0.549	02/01/2010 18:14	0.774
02/01/2010 10:54		02/01/2010 13:29	0.533	02/01/2010 16:02	0.546	02/01/2010 18:15	0.701
02/01/2010 10:55	0.510	02/01/2010 13:30	0.556	02/01/2010 16:03	0.579	02/01/2010 18:16	0.616
02/01/2010 10:56	0.547	02/01/2010 13:31	0.589	02/01/2010 16:04	0.621	02/01/2010 18:17	0.551
02/01/2010 10:57	0.585	02/01/2010 13:32	0.612	02/01/2010 16:05		02/01/2010 18:18	0.527
02/01/2010 10:58	0.616	02/01/2010 13:33	0.621	02/01/2010 16:06		02/01/2010 18:19	0.541
02/01/2010 10:59	0.634	02/01/2010 13:34	0.586	02/01/2010 16:07		02/01/2010 18:20	
02/01/2010 11:00	0.606	02/01/2010 13:35		02/01/2010 16:08		02/01/2010 18:21	
02/01/2010 11:01	0.582	02/01/2010 13:36		02/01/2010 16:09		02/01/2010 18:22	
02/01/2010 11:02	0.591	02/01/2010 13:37		02/01/2010 16:10	0.656	02/01/2010 18:23	
02/01/2010 11:03	0.608	02/01/2010 13:38		02/01/2010 16:11	0.603	02/01/2010 18:24	
02/01/2010 11:04	0.588	02/01/2010 13:39		02/01/2010 16:12	0.556	02/01/2010 18:25	0.787
02/01/2010 11:05		02/01/2010 13:40	0.567	02/01/2010 16:13	0.537	02/01/2010 18:26	0.748
02/01/2010 11:06		02/01/2010 13:41	0.546	02/01/2010 16:14	0.554	02/01/2010 18:27	0.659
02/01/2010 11:07		02/01/2010 13:42	0.558	02/01/2010 16:15	0.590	02/01/2010 18:28	0.563
02/01/2010 11:08		02/01/2010 13:43	0.576	02/01/2010 16:16	0.632	02/01/2010 18:29	0.511
02/01/2010 11:09		02/01/2010 13:44	0.599	02/01/2010 16:17	0.667	02/01/2010 18:30	0.502
02/01/2010 11:10	0.606	02/01/2010 13:45	0.601	02/01/2010 16:18	0.711	02/01/2010 18:31	0.515
02/01/2010 11:11	0.566	02/01/2010 13:46	0.567	02/01/2010 16:19	0.751	02/01/2010 18:32	0.566
02/01/2010 11:12	0.567	02/01/2010 13:47	0.534	02/01/2010 16:20		02/01/2010 18:33	0.610
02/01/2010 11:13	0.590	02/01/2010 13:48	0.514	02/01/2010 16:21		02/01/2010 18:34	0.649
02/01/2010 11:14	0.610	02/01/2010 13:49	0.527	02/01/2010 16:22		02/01/2010 18:35	
02/01/2010 11:15	0.600	02/01/2010 13:50		02/01/2010 16:23		02/01/2010 18:36	
02/01/2010 11:16	0.575	02/01/2010 13:51		02/01/2010 16:24		02/01/2010 18:37	
02/01/2010 11:17	0.581	02/01/2010 13:52		02/01/2010 16:25	0.536	02/01/2010 18:38	
02/01/2010 11:18	0.569	02/01/2010 13:53		02/01/2010 16:26	0.555	02/01/2010 18:39	
02/01/2010 11:19	0.586	02/01/2010 13:54		02/01/2010 16:27	0.590	02/01/2010 18:40	0.630
02/01/2010 11:20		02/01/2010 13:55	0.564	02/01/2010 16:28	0.632	02/01/2010 18:41	0.587
02/01/2010 11:21		02/01/2010 13:56	0.585	02/01/2010 16:29	0.672	02/01/2010 18:42	0.557
02/01/2010 11:22		02/01/2010 13:57	0.572	02/01/2010 16:30	0.714	02/01/2010 18:43	0.570
02/01/2010 11:23		02/01/2010 13:58	0.540	02/01/2010 16:31	0.764	02/01/2010 18:44	0.604
02/01/2010 11:24		02/01/2010 13:59	0.510	02/01/2010 16:32	0.785	02/01/2010 18:45	0.634
02/01/2010 11:25	0.592	02/01/2010 14:00	0.501	02/01/2010 16:33	0.745	02/01/2010 18:46	0.668
02/01/2010 11:26	0.629	02/01/2010 14:01	0.517	02/01/2010 16:34	0.663	02/01/2010 18:47	0.691
02/01/2010 11:27	0.646	02/01/2010 14:02	0.546	02/01/2010 16:35		02/01/2010 18:48	0.662
02/01/2010 11:28	0.616	02/01/2010 14:03	0.579	02/01/2010 16:36		02/01/2010 18:49	0.619
02/01/2010 11:29	0.584	02/01/2010 14:04	0.621	02/01/2010 16:37		02/01/2010 18:50	
02/01/2010 11:30	0.560	02/01/2010 14:05		02/01/2010 16:38		02/01/2010 18:51	
02/01/2010 11:31	0.540	02/01/2010 14:06		02/01/2010 16:39		02/01/2010 18:52	
02/01/2010 11:32	0.505	02/01/2010 14:07		02/01/2010 16:40	0.626	02/01/2010 18:53	
02/01/2010 11:33	0.506	02/01/2010 14:08		02/01/2010 16:41	0.687	02/01/2010 18:54	
02/01/2010 11:34	0.539	02/01/2010 14:09		02/01/2010 16:42	0.730	02/01/2010 18:55	0.611
02/01/2010 11:35		02/01/2010 14:10	0.466	02/01/2010 16:43	0.762	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	Run 2	Run 3	Run 4
Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph
Total SUM 221.9372	Total SUM 222.7064	Total SUM 265.1233	Total SUM 265.2815

Run 1		Run 2		Run 3		Run 4	
Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph
2/1/2010 10:35	54.05	2/1/2010 13:10	54.21	2/1/2010 15:43	65.18	2/1/2010 17:56	64.57
2/1/2010 10:36	54.05	2/1/2010 13:11	54.21	2/1/2010 15:44	65.25	2/1/2010 17:57	64.57
2/1/2010 10:37	54.05	2/1/2010 13:12	54.21	2/1/2010 15:45	65.48	2/1/2010 17:58	64.66
2/1/2010 10:38	54.05	2/1/2010 13:13	54.13	2/1/2010 15:46	65.47	2/1/2010 17:59	64.98
2/1/2010 10:39	54.05	2/1/2010 13:14	54.01	2/1/2010 15:47	65.39	2/1/2010 18:00	65.05
2/1/2010 10:40	54.05	2/1/2010 13:15	54.24	2/1/2010 15:48	65.2	2/1/2010 18:01	64.74
2/1/2010 10:41	54.05	2/1/2010 13:16	54.2	2/1/2010 15:49	65.26	2/1/2010 18:02	65.06
2/1/2010 10:42	54.18	2/1/2010 13:17	54.24	2/1/2010 15:50	65.32	2/1/2010 18:03	65.27
2/1/2010 10:43	54.56	2/1/2010 13:18	54.43	2/1/2010 15:51	65.29	2/1/2010 18:04	65.25
2/1/2010 10:44	54.49	2/1/2010 13:19	54.42	2/1/2010 15:52	65.08	2/1/2010 18:05	65.17
2/1/2010 10:45	54.29	2/1/2010 13:20	54.41	2/1/2010 15:53	65.15	2/1/2010 18:06	64.97
2/1/2010 10:46	54.3	2/1/2010 13:21	54.35	2/1/2010 15:54	65.31	2/1/2010 18:07	64.93
2/1/2010 10:47	54.31	2/1/2010 13:22	54.19	2/1/2010 15:55	65.1	2/1/2010 18:08	65.07
2/1/2010 10:48	54.32	2/1/2010 13:23	54.25	2/1/2010 15:56	64.76	2/1/2010 18:09	65.34
2/1/2010 10:49	54.42	2/1/2010 13:24	54.31	2/1/2010 15:57	64.91	2/1/2010 18:10	65.05
2/1/2010 10:50	54.59	2/1/2010 13:25	54.27	2/1/2010 15:58	64.74	2/1/2010 18:11	65.16
2/1/2010 10:51	54.34	2/1/2010 13:26	54.12	2/1/2010 15:59	64.91	2/1/2010 18:12	65.07
2/1/2010 10:52	54.19	2/1/2010 13:27	54.34	2/1/2010 16:00	64.71	2/1/2010 18:13	65.2
2/1/2010 10:53	54.15	2/1/2010 13:28	54.4	2/1/2010 16:01	64.72	2/1/2010 18:14	64.98
2/1/2010 10:54	54.44	2/1/2010 13:29	54.59	2/1/2010 16:02	64.74	2/1/2010 18:15	64.91
2/1/2010 10:55	54.58	2/1/2010 13:30	54.47	2/1/2010 16:03	64.67	2/1/2010 18:16	64.66
2/1/2010 10:56	54.26	2/1/2010 13:31	54.38	2/1/2010 16:04	64.56	2/1/2010 18:17	64.57
2/1/2010 10:57	54.02	2/1/2010 13:32	54.3	2/1/2010 16:05	64.79	2/1/2010 18:18	64.79
2/1/2010 10:58	53.94	2/1/2010 13:33	54.02	2/1/2010 16:06	64.81	2/1/2010 18:19	64.82
2/1/2010 10:59	53.75	2/1/2010 13:34	53.89	2/1/2010 16:07	64.83	2/1/2010 18:20	64.76
2/1/2010 11:00	53.76	2/1/2010 13:35	54.14	2/1/2010 16:08	64.86	2/1/2010 18:21	64.66
2/1/2010 11:01	53.84	2/1/2010 13:36	54.25	2/1/2010 16:09	64.88	2/1/2010 18:22	64.92
2/1/2010 11:02	54.06	2/1/2010 13:37	53.97	2/1/2010 16:10	64.82	2/1/2010 18:23	64.9
2/1/2010 11:03	53.98	2/1/2010 13:38	53.84	2/1/2010 16:11	64.62	2/1/2010 18:24	64.89
2/1/2010 11:04	53.85	2/1/2010 13:39	54.14	2/1/2010 16:12	64.62	2/1/2010 18:25	64.88
2/1/2010 11:05	54.06	2/1/2010 13:40	54.35	2/1/2010 16:13	64.7	2/1/2010 18:26	64.94
2/1/2010 11:06	53.98	2/1/2010 13:41	54.32	2/1/2010 16:14	64.98	2/1/2010 18:27	65.12
2/1/2010 11:07	53.79	2/1/2010 13:42	54.29	2/1/2010 16:15	65.18	2/1/2010 18:28	64.98
2/1/2010 11:08	53.93	2/1/2010 13:43	54.26	2/1/2010 16:16	65.08	2/1/2010 18:29	64.73
2/1/2010 11:09	54.06	2/1/2010 13:44	54.16	2/1/2010 16:17	64.86	2/1/2010 18:30	64.65
2/1/2010 11:10	54.09	2/1/2010 13:45	53.99	2/1/2010 16:18	64.85	2/1/2010 18:31	64.51
2/1/2010 11:11	53.91	2/1/2010 13:46	54.01	2/1/2010 16:19	64.84	2/1/2010 18:32	64.65
2/1/2010 11:12	54.02	2/1/2010 13:47	53.91	2/1/2010 16:20	64.83	2/1/2010 18:33	64.83
2/1/2010 11:13	54.11	2/1/2010 13:48	54.25	2/1/2010 16:21	64.9	2/1/2010 18:34	65.06
2/1/2010 11:14	54.1	2/1/2010 13:49	54.63	2/1/2010 16:22	65.04	2/1/2010 18:35	65.12
2/1/2010 11:15	54.1	2/1/2010 13:50	54.54	2/1/2010 16:23	64.85	2/1/2010 18:36	65.07
2/1/2010 11:16	54.1	2/1/2010 13:51	54.3	2/1/2010 16:24	64.77	2/1/2010 18:37	65.02
2/1/2010 11:17	54.1	2/1/2010 13:52	54.36	2/1/2010 16:25	64.62	2/1/2010 18:38	65.36
2/1/2010 11:18	54.1	2/1/2010 13:53	54.47	2/1/2010 16:26	64.8	2/1/2010 18:39	65.13
2/1/2010 11:19	54.1	2/1/2010 13:54	54.27	2/1/2010 16:27	64.93	2/1/2010 18:40	64.91
2/1/2010 11:20	54.1	2/1/2010 13:55	54.2	2/1/2010 16:28	64.92	2/1/2010 18:41	64.83
2/1/2010 11:21	54.17	2/1/2010 13:56	54.08	2/1/2010 16:29	64.83	2/1/2010 18:42	64.96
2/1/2010 11:22	54.37	2/1/2010 13:57	54.18	2/1/2010 16:30	64.72	2/1/2010 18:43	64.73
2/1/2010 11:23	54.39	2/1/2010 13:58	53.97	2/1/2010 16:31	65.03	2/1/2010 18:44	64.82
2/1/2010 11:24	54.4	2/1/2010 13:59	54.17	2/1/2010 16:32	65.08	2/1/2010 18:45	65.1
2/1/2010 11:25	54.35	2/1/2010 14:00	54.17	2/1/2010 16:33	64.63	2/1/2010 18:46	65.28
2/1/2010 11:26	54.16	2/1/2010 14:01	54.17	2/1/2010 16:34	64.63	2/1/2010 18:47	65.19
2/1/2010 11:27	54.09	2/1/2010 14:02	54.18	2/1/2010 16:35	64.7	2/1/2010 18:48	65.21
2/1/2010 11:28	53.89	2/1/2010 14:03	54.18	2/1/2010 16:36	64.97	2/1/2010 18:49	65.35
2/1/2010 11:29	53.98	2/1/2010 14:04	54.18	2/1/2010 16:37	65.09	2/1/2010 18:50	65.17
2/1/2010 11:30	54.26	2/1/2010 14:05	54.18	2/1/2010 16:38	64.89	2/1/2010 18:51	65.12
2/1/2010 11:31	54.36	2/1/2010 14:06	54.31	2/1/2010 16:39	64.89	2/1/2010 18:52	65.03
2/1/2010 11:32	54.53	2/1/2010 14:07	54.66	2/1/2010 16:40	64.79	2/1/2010 18:53	65.17
2/1/2010 11:33	54.32	2/1/2010 14:08	54.59	2/1/2010 16:41	64.62	2/1/2010 18:54	64.99
2/1/2010 11:34	54.32	2/1/2010 14:09	54.47	2/1/2010 16:42	64.89	2/1/2010 18:55	64.91
2/1/2010 11:35	54.25	2/1/2010 14:10	54.7	2/1/2010 16:43	65.01	2/1/2010 18:56	64.79
Average	54.15508197	Average	54.25295	Average	64.92377	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	66.69	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	66.61	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	66.62
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	221.937213	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

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		Run 6		Run 7		Run 8		Run 9	
Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value
02/02/2010 06:35		02/02/2010 09:02	0.436	02/02/2010 13:05		02/02/2010 17:30	0.682	02/02/2010 19:44	0.736
02/02/2010 06:36		02/02/2010 09:03	0.454	02/02/2010 13:06		02/02/2010 17:31	0.669	02/02/2010 19:45	0.764
02/02/2010 06:37		02/02/2010 09:04	0.477	02/02/2010 13:07		02/02/2010 17:32	0.665	02/02/2010 19:46	0.751
02/02/2010 06:38		02/02/2010 09:05		02/02/2010 13:08		02/02/2010 17:33	0.653	02/02/2010 19:47	0.754
02/02/2010 06:39		02/02/2010 09:06		02/02/2010 13:09		02/02/2010 17:34	0.622	02/02/2010 19:48	0.674
02/02/2010 06:40	0.452	02/02/2010 09:07		02/02/2010 13:10	0.543	02/02/2010 17:35		02/02/2010 19:49	0.681
02/02/2010 06:41	0.483	02/02/2010 09:08		02/02/2010 13:11	0.524	02/02/2010 17:36		02/02/2010 19:50	
02/02/2010 06:42	0.518	02/02/2010 09:09		02/02/2010 13:12	0.487	02/02/2010 17:37		02/02/2010 19:51	
02/02/2010 06:43	0.552	02/02/2010 09:10	0.553	02/02/2010 13:13	0.463	02/02/2010 17:38		02/02/2010 19:52	
02/02/2010 06:44	0.578	02/02/2010 09:11	0.501	02/02/2010 13:14	0.427	02/02/2010 17:39		02/02/2010 19:53	
02/02/2010 06:45	0.603	02/02/2010 09:12	0.447	02/02/2010 13:15	0.404	02/02/2010 17:40	0.662	02/02/2010 19:54	
02/02/2010 06:46	0.594	02/02/2010 09:13	0.415	02/02/2010 13:16	0.425	02/02/2010 17:41	0.704	02/02/2010 19:55	0.686
02/02/2010 06:47	0.541	02/02/2010 09:14	0.410	02/02/2010 13:17	0.460	02/02/2010 17:42	0.739	02/02/2010 19:56	0.708
02/02/2010 06:48	0.505	02/02/2010 09:15	0.429	02/02/2010 13:18	0.486	02/02/2010 17:43	0.757	02/02/2010 19:57	0.718
02/02/2010 06:49	0.459	02/02/2010 09:16	0.453	02/02/2010 13:19	0.517	02/02/2010 17:44	0.743	02/02/2010 19:58	0.686
02/02/2010 06:50		02/02/2010 09:17	0.470	02/02/2010 13:20		02/02/2010 17:45	0.698	02/02/2010 19:59	0.646
02/02/2010 06:51		02/02/2010 09:18	0.494	02/02/2010 13:21		02/02/2010 17:46	0.637	02/02/2010 20:00	0.619
02/02/2010 06:52		02/02/2010 09:19	0.508	02/02/2010 13:22		02/02/2010 17:47	0.584	02/02/2010 20:01	0.642
02/02/2010 06:53		02/02/2010 09:20		02/02/2010 13:23		02/02/2010 17:48	0.553	02/02/2010 20:02	0.675
02/02/2010 06:54		02/02/2010 09:21		02/02/2010 13:24		02/02/2010 17:49	0.549	02/02/2010 20:03	0.722
02/02/2010 06:55	0.471	02/02/2010 09:22		02/02/2010 13:25	0.561	02/02/2010 17:50		02/02/2010 20:04	0.759
02/02/2010 06:56	0.501	02/02/2010 09:23		02/02/2010 13:26	0.507	02/02/2010 17:51		02/02/2010 20:05	
02/02/2010 06:57	0.529	02/02/2010 09:24		02/02/2010 13:27	0.463	02/02/2010 17:52		02/02/2010 20:06	
02/02/2010 06:58	0.555	02/02/2010 09:25	0.486	02/02/2010 13:28	0.448	02/02/2010 17:53		02/02/2010 20:07	
02/02/2010 06:59	0.580	02/02/2010 09:26	0.511	02/02/2010 13:29	0.450	02/02/2010 17:54		02/02/2010 20:08	
02/02/2010 07:00	0.603	02/02/2010 09:27	0.527	02/02/2010 13:30	0.471	02/02/2010 17:55	0.722	02/02/2010 20:09	
02/02/2010 07:01	0.603	02/02/2010 09:28	0.544	02/02/2010 13:31	0.501	02/02/2010 17:56	0.745	02/02/2010 20:10	0.699
02/02/2010 07:02	0.542	02/02/2010 09:29	0.522	02/02/2010 13:32	0.523	02/02/2010 17:57	0.757	02/02/2010 20:11	0.707
02/02/2010 07:03	0.462	02/02/2010 09:30	0.505	02/02/2010 13:33	0.551	02/02/2010 17:58	0.730	02/02/2010 20:12	0.698
02/02/2010 07:04	0.409	02/02/2010 09:31	0.501	02/02/2010 13:34	0.593	02/02/2010 17:59	0.675	02/02/2010 20:13	0.686
02/02/2010 07:05		02/02/2010 09:32	0.465	02/02/2010 13:35		02/02/2010 18:00	0.619	02/02/2010 20:14	0.692
02/02/2010 07:06		02/02/2010 09:33	0.424	02/02/2010 13:36		02/02/2010 18:01	0.583	02/02/2010 20:15	0.711
02/02/2010 07:07		02/02/2010 09:34	0.401	02/02/2010 13:37		02/02/2010 18:02	0.568	02/02/2010 20:16	0.741
02/02/2010 07:08		02/02/2010 09:35		02/02/2010 13:38		02/02/2010 18:03	0.580	02/02/2010 20:17	0.731
02/02/2010 07:09		02/02/2010 09:36		02/02/2010 13:39		02/02/2010 18:04	0.615	02/02/2010 20:18	0.680
02/02/2010 07:10	0.497	02/02/2010 09:37		02/02/2010 13:40	0.611	02/02/2010 18:05		02/02/2010 20:19	0.654
02/02/2010 07:11	0.525	02/02/2010 09:38		02/02/2010 13:41	0.613	02/02/2010 18:06		02/02/2010 20:20	
02/02/2010 07:12	0.521	02/02/2010 09:39		02/02/2010 13:42	0.579	02/02/2010 18:07		02/02/2010 20:21	
02/02/2010 07:13	0.497	02/02/2010 09:40	0.483	02/02/2010 13:43	0.547	02/02/2010 18:08		02/02/2010 20:22	
02/02/2010 07:14	0.465	02/02/2010 09:41	0.508	02/02/2010 13:44	0.533	02/02/2010 18:09		02/02/2010 20:23	
02/02/2010 07:15	0.456	02/02/2010 09:42	0.534	02/02/2010 13:45	0.528	02/02/2010 18:10	0.769	02/02/2010 20:24	
02/02/2010 07:16	0.466	02/02/2010 09:43	0.558	02/02/2010 13:46	0.545	02/02/2010 18:11	0.716	02/02/2010 20:25	0.832
02/02/2010 07:17	0.492	02/02/2010 09:44	0.563	02/02/2010 13:47	0.567	02/02/2010 18:12	0.668	02/02/2010 20:26	0.836
02/02/2010 07:18	0.520	02/02/2010 09:45	0.544	02/02/2010 13:48	0.583	02/02/2010 18:13	0.623	02/02/2010 20:27	0.803
02/02/2010 07:19	0.528	02/02/2010 09:46	0.513	02/02/2010 13:49	0.597	02/02/2010 18:14	0.611	02/02/2010 20:28	0.727
02/02/2010 07:20		02/02/2010 09:47	0.480	02/02/2010 13:50		02/02/2010 18:15	0.606	02/02/2010 20:29	0.650
02/02/2010 07:21		02/02/2010 09:48	0.457	02/02/2010 13:51		02/02/2010 18:16	0.619	02/02/2010 20:30	0.601
02/02/2010 07:22		02/02/2010 09:49	0.439	02/02/2010 13:52		02/02/2010 18:17	0.655	02/02/2010 20:31	0.579
02/02/2010 07:23		02/02/2010 09:50		02/02/2010 13:53		02/02/2010 18:18	0.683	02/02/2010 20:32	0.592
02/02/2010 07:24		02/02/2010 09:51		02/02/2010 13:54		02/02/2010 18:19	0.702	02/02/2010 20:33	0.627
02/02/2010 07:25	0.445	02/02/2010 09:52		02/02/2010 13:55	0.604	02/02/2010 18:20		02/02/2010 20:34	0.673
02/02/2010 07:26	0.410	02/02/2010 09:53		02/02/2010 13:56	0.637	02/02/2010 18:21		02/02/2010 20:35	
02/02/2010 07:27	0.393	02/02/2010 09:54		02/02/2010 13:57	0.666	02/02/2010 18:22		02/02/2010 20:36	
02/02/2010 07:28	0.407	02/02/2010 09:55	0.505	02/02/2010 13:58	0.695	02/02/2010 18:23		02/02/2010 20:37	
02/02/2010 07:29	0.426	02/02/2010 09:56	0.506	02/02/2010 13:59	0.671	02/02/2010 18:24		02/02/2010 20:38	
02/02/2010 07:30	0.461	02/02/2010 09:57	0.477	02/02/2010 14:00	0.639	02/02/2010 18:25	0.673	02/02/2010 20:39	
02/02/2010 07:31	0.490	02/02/2010 09:58	0.449	02/02/2010 14:01	0.601	02/02/2010 18:26	0.710	02/02/2010 20:40	0.809
02/02/2010 07:32	0.514	02/02/2010 09:59	0.443	02/02/2010 14:02	0.548	02/02/2010 18:27	0.742	02/02/2010 20:41	0.754
02/02/2010 07:33	0.538	02/02/2010 10:00	0.460	02/02/2010 14:03	0.512	02/02/2010 18:28	0.770	02/02/2010 20:42	0.687
02/02/2010 07:34	0.561	02/02/2010 10:01	0.488	02/02/2010 14:04	0.497	02/02/2010 18:29	0.780	02/02/2010 20:43	0.640
02/02/2010 07:35		02/02/2010 10:02	0.505	02/02/2010 14:05		02/02/2010 18:30	0.753	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
5 minutes BB	35
	50

Run 5	Run 6	Run 7	Run 8	Run 9
Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph
Total SUM 220.898	Total SUM 221.7011	Total SUM 278.5669	Total SUM 303.6869	Total SUM 304.7423

Run 5		Run 6		Run 7		Run 8		Run 9	
Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph
2/2/2010 6:35	53.87	2/2/2010 9:02	53.72	2/2/2010 13:04	54.55	2/2/2010 17:30	74.41	2/2/2010 19:44	74.11
2/2/2010 6:36	53.98	2/2/2010 9:03	53.72	2/2/2010 13:05	54.17	2/2/2010 17:31	74.22	2/2/2010 19:45	74.23
2/2/2010 6:37	53.92	2/2/2010 9:04	53.73	2/2/2010 13:06	54.17	2/2/2010 17:32	74.43	2/2/2010 19:46	74.39
2/2/2010 6:38	54.1	2/2/2010 9:05	53.89	2/2/2010 13:07	54.27	2/2/2010 17:33	74.66	2/2/2010 19:47	74.45
2/2/2010 6:39	54.01	2/2/2010 9:06	54.09	2/2/2010 13:08	54.44	2/2/2010 17:34	74.48	2/2/2010 19:48	74.61
2/2/2010 6:40	53.92	2/2/2010 9:07	53.92	2/2/2010 13:09	54.45	2/2/2010 17:35	74.48	2/2/2010 19:49	74.8
2/2/2010 6:41	53.91	2/2/2010 9:08	53.81	2/2/2010 13:10	54.46	2/2/2010 17:36	74.35	2/2/2010 19:50	74.49
2/2/2010 6:42	53.54	2/2/2010 9:09	53.67	2/2/2010 13:11	54.47	2/2/2010 17:37	74.16	2/2/2010 19:51	72.9
2/2/2010 6:43	53.52	2/2/2010 9:10	53.86	2/2/2010 13:12	54.48	2/2/2010 17:38	74.19	2/2/2010 19:52	70.7
2/2/2010 6:44	53.55	2/2/2010 9:11	53.98	2/2/2010 13:13	54.83	2/2/2010 17:39	74.22	2/2/2010 19:53	70.18
2/2/2010 6:45	53.7	2/2/2010 9:12	53.98	2/2/2010 13:14	55.65	2/2/2010 17:40	74.26	2/2/2010 19:54	69.79
2/2/2010 6:46	54.06	2/2/2010 9:13	54.08	2/2/2010 13:15	56.45	2/2/2010 17:41	74.46	2/2/2010 19:55	70.95
2/2/2010 6:47	54.59	2/2/2010 9:14	54.15	2/2/2010 13:16	57.81	2/2/2010 17:42	74.76	2/2/2010 19:56	72.51
2/2/2010 6:48	54.47	2/2/2010 9:15	53.94	2/2/2010 13:17	59.53	2/2/2010 17:43	74.62	2/2/2010 19:57	73.94
2/2/2010 6:49	54.27	2/2/2010 9:16	53.83	2/2/2010 13:18	61.25	2/2/2010 17:44	74.43	2/2/2010 19:58	74.84
2/2/2010 6:50	54.22	2/2/2010 9:17	53.7	2/2/2010 13:19	62.77	2/2/2010 17:45	74.55	2/2/2010 19:59	74.96
2/2/2010 6:51	54.06	2/2/2010 9:18	53.91	2/2/2010 13:20	63.6	2/2/2010 17:46	74.57	2/2/2010 20:00	74.8
2/2/2010 6:52	54.05	2/2/2010 9:19	54.12	2/2/2010 13:21	63.78	2/2/2010 17:47	74.43	2/2/2010 20:01	74.83
2/2/2010 6:53	53.77	2/2/2010 9:20	54.26	2/2/2010 13:22	63.99	2/2/2010 17:48	74.44	2/2/2010 20:02	75.05
2/2/2010 6:54	53.5	2/2/2010 9:21	54.27	2/2/2010 13:23	64.64	2/2/2010 17:49	74.66	2/2/2010 20:03	75.14
2/2/2010 6:55	53.41	2/2/2010 9:22	54.19	2/2/2010 13:24	65.71	2/2/2010 17:50	74.59	2/2/2010 20:04	74.94
2/2/2010 6:56	53.39	2/2/2010 9:23	54.11	2/2/2010 13:25	66.88	2/2/2010 17:51	74.25	2/2/2010 20:05	75.18
2/2/2010 6:57	53.21	2/2/2010 9:24	54.29	2/2/2010 13:26	67.54	2/2/2010 17:52	74.22	2/2/2010 20:06	75.32
2/2/2010 6:58	53.38	2/2/2010 9:25	54.31	2/2/2010 13:27	68.35	2/2/2010 17:53	74.41	2/2/2010 20:07	75.62
2/2/2010 6:59	53.12	2/2/2010 9:26	54.32	2/2/2010 13:28	69.07	2/2/2010 17:54	74.74	2/2/2010 20:08	75.85
2/2/2010 7:00	53.43	2/2/2010 9:27	54.24	2/2/2010 13:29	69.64	2/2/2010 17:55	74.74	2/2/2010 20:09	76
2/2/2010 7:01	53.74	2/2/2010 9:28	54.08	2/2/2010 13:30	70.12	2/2/2010 17:56	74.75	2/2/2010 20:10	76.15
2/2/2010 7:02	54.06	2/2/2010 9:29	54.01	2/2/2010 13:31	70.92	2/2/2010 17:57	74.75	2/2/2010 20:11	76.29
2/2/2010 7:03	54.16	2/2/2010 9:30	53.86	2/2/2010 13:32	71.75	2/2/2010 17:58	74.65	2/2/2010 20:12	76.66
2/2/2010 7:04	53.96	2/2/2010 9:31	53.99	2/2/2010 13:33	71.27	2/2/2010 17:59	74.49	2/2/2010 20:13	76.84
2/2/2010 7:05	53.97	2/2/2010 9:32	54.08	2/2/2010 13:34	70.89	2/2/2010 18:00	74.5	2/2/2010 20:14	76.31
2/2/2010 7:06	53.88	2/2/2010 9:33	54.2	2/2/2010 13:35	70.2	2/2/2010 18:01	74.52	2/2/2010 20:15	76.09
2/2/2010 7:07	53.69	2/2/2010 9:34	54.27	2/2/2010 13:36	69.56	2/2/2010 18:02	74.29	2/2/2010 20:16	76.1
2/2/2010 7:08	53.75	2/2/2010 9:35	54.07	2/2/2010 13:37	69.41	2/2/2010 18:03	74.02	2/2/2010 20:17	76.2
2/2/2010 7:09	53.8	2/2/2010 9:36	54.1	2/2/2010 13:38	69.44	2/2/2010 18:04	74.08	2/2/2010 20:18	76.21
2/2/2010 7:10	53.61	2/2/2010 9:37	54.13	2/2/2010 13:39	70.02	2/2/2010 18:05	74.05	2/2/2010 20:19	75.98
2/2/2010 7:11	53.61	2/2/2010 9:38	54.06	2/2/2010 13:40	71.01	2/2/2010 18:06	74.26	2/2/2010 20:20	75.88
2/2/2010 7:12	53.62	2/2/2010 9:39	53.99	2/2/2010 13:41	72	2/2/2010 18:07	74.25	2/2/2010 20:21	75.72
2/2/2010 7:13	53.53	2/2/2010 9:40	54.07	2/2/2010 13:42	72.82	2/2/2010 18:08	74.25	2/2/2010 20:22	75.56
2/2/2010 7:14	53.47	2/2/2010 9:41	53.75	2/2/2010 13:43	73.49	2/2/2010 18:09	74.24	2/2/2010 20:23	75.42
2/2/2010 7:15	53.7	2/2/2010 9:42	53.66	2/2/2010 13:44	74.38	2/2/2010 18:10	74.24	2/2/2010 20:24	75.32
2/2/2010 7:16	53.67	2/2/2010 9:43	53.87	2/2/2010 13:45	75.39	2/2/2010 18:11	74.23	2/2/2010 20:25	75.5
2/2/2010 7:17	53.54	2/2/2010 9:44	53.87	2/2/2010 13:46	76.95	2/2/2010 18:12	74.46	2/2/2010 20:26	75.51
2/2/2010 7:18	53.45	2/2/2010 9:45	53.79	2/2/2010 13:47	78.31	2/2/2010 18:13	74.77	2/2/2010 20:27	75.52
2/2/2010 7:19	53.52	2/2/2010 9:46	53.59	2/2/2010 13:48	78.31	2/2/2010 18:14	74.67	2/2/2010 20:28	75.52
2/2/2010 7:20	53.74	2/2/2010 9:47	53.66	2/2/2010 13:49	78.21	2/2/2010 18:15	74.61	2/2/2010 20:29	75.53
2/2/2010 7:21	53.97	2/2/2010 9:48	54.14	2/2/2010 13:50	78.26	2/2/2010 18:16	74.48	2/2/2010 20:30	75.47
2/2/2010 7:22	54.11	2/2/2010 9:49	54.34	2/2/2010 13:51	78.53	2/2/2010 18:17	74.5	2/2/2010 20:31	75.16
2/2/2010 7:23	54.02	2/2/2010 9:50	54.32	2/2/2010 13:52	78.46	2/2/2010 18:18	74.47	2/2/2010 20:32	74.95
2/2/2010 7:24	53.95	2/2/2010 9:51	54.3	2/2/2010 13:53	78.64	2/2/2010 18:19	74.21	2/2/2010 20:33	75.01
2/2/2010 7:25	54.09	2/2/2010 9:52	54.28	2/2/2010 13:54	78.49	2/2/2010 18:20	74.62	2/2/2010 20:34	74.71
2/2/2010 7:26	54.01	2/2/2010 9:53	54.36	2/2/2010 13:55	78.25	2/2/2010 18:21	74.58	2/2/2010 20:35	74.51
2/2/2010 7:27	54.18	2/2/2010 9:54	54.47	2/2/2010 13:56	78.36	2/2/2010 18:22	74.74	2/2/2010 20:36	74.59
2/2/2010 7:28	54.08	2/2/2010 9:55	54.3	2/2/2010 13:57	78.45	2/2/2010 18:23	74.72	2/2/2010 20:37	74.66
2/2/2010 7:29	54	2/2/2010 9:56	54.19	2/2/2010 13:58	78.48	2/2/2010 18:24	74.69	2/2/2010 20:38	74.5
2/2/2010 7:30	54.16	2/2/2010 9:57	54.19	2/2/2010 13:59	78.52	2/2/2010 18:25	74.79	2/2/2010 20:39	74.64
2/2/2010 7:31	54.16	2/2/2010 9:58	54.19	2/2/2010 14:00	78.56	2/2/2010 18:26	74.87	2/2/2010 20:40	74.64
2/2/2010 7:32	54.16	2/2/2010 9:59	54.19	2/2/2010 14:01	78.48	2/2/2010 18:27	74.72	2/2/2010 20:41	74.32
2/2/2010 7:33	54.16	2/2/2010 10:00	54.2	2/2/2010 14:02	78.44	2/2/2010 18:28	74.38	2/2/2010 20:42	74.46
2/2/2010 7:34	54.16	2/2/2010 10:01	54.2	2/2/2010 14:03	78.66	2/2/2010 18:29	73.98	2/2/2010 20:43	74.64
2/2/2010 7:35	54.07	2/2/2010 10:02	54.2	2/2/2010 14:04	78.07	2/2/2010 18:30	74.27	2/2/2010 20:44	74.53
Average	53.84754	Average	54.05016	Average	68.72213	Average	74.45623	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	55.76	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	55.92	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	55.74656	Average	55.93246	Average	69.9582	Average	76.38885	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	76.21	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	75.84	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

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	0.606
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	0.728
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	0.664
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	0.639
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	0.608
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	
15 minutes	5
5 minutes BB	20
	35
	50

Run 10	Run 11	Run 12
Coal Flow Coal Flow kpph	*Coal Flow Coal Flow kpph*	*Coal Flow Coal Flow kpph*
Total SUM 306.1031	Total SUM 307.5582	Total SUM 307.3282

Run 10		Run 11		Run 12	
Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph
2/3/2010 8:45	74.6	2/3/2010 12:55	75.29	2/3/2010 17:25	72.03
2/3/2010 8:46	74.64	2/3/2010 12:56	75.47	2/3/2010 17:26	73.79
2/3/2010 8:47	74.69	2/3/2010 12:57	75.39	2/3/2010 17:27	74.6
2/3/2010 8:48	74.84	2/3/2010 12:58	75.19	2/3/2010 17:28	74.69
2/3/2010 8:49	75.06	2/3/2010 12:59	75.36	2/3/2010 17:29	74.5
2/3/2010 8:50	75.15	2/3/2010 13:00	75.39	2/3/2010 17:30	74.62
2/3/2010 8:51	75.25	2/3/2010 13:01	75.41	2/3/2010 17:31	74.91
2/3/2010 8:52	75.19	2/3/2010 13:02	75.3	2/3/2010 17:32	74.89
2/3/2010 8:53	75.12	2/3/2010 13:03	75.26	2/3/2010 17:33	75.04
2/3/2010 8:54	75.29	2/3/2010 13:04	75.47	2/3/2010 17:34	75.21
2/3/2010 8:55	75.06	2/3/2010 13:05	75.59	2/3/2010 17:35	75.35
2/3/2010 8:56	74.81	2/3/2010 13:06	75.6	2/3/2010 17:36	75.35
2/3/2010 8:57	75.13	2/3/2010 13:07	75.6	2/3/2010 17:37	75.2
2/3/2010 8:58	75.44	2/3/2010 13:08	75.61	2/3/2010 17:38	75.33
2/3/2010 8:59	75.54	2/3/2010 13:09	75.49	2/3/2010 17:39	75.61
2/3/2010 9:00	75.37	2/3/2010 13:10	75.67	2/3/2010 17:40	75.61
2/3/2010 9:01	75.42	2/3/2010 13:11	75.87	2/3/2010 17:41	75.75
2/3/2010 9:02	75.56	2/3/2010 13:12	75.7	2/3/2010 17:42	76.18
2/3/2010 9:03	75.52	2/3/2010 13:13	75.7	2/3/2010 17:43	76.44
2/3/2010 9:04	75.48	2/3/2010 13:14	75.54	2/3/2010 17:44	76.93
2/3/2010 9:05	75.43	2/3/2010 13:15	75.53	2/3/2010 17:45	77.09
2/3/2010 9:06	75.28	2/3/2010 13:16	75.71	2/3/2010 17:46	77.52
2/3/2010 9:07	75.13	2/3/2010 13:17	75.39	2/3/2010 17:47	77.94
2/3/2010 9:08	75.15	2/3/2010 13:18	75.17	2/3/2010 17:48	77.16
2/3/2010 9:09	75.16	2/3/2010 13:19	75.46	2/3/2010 17:49	76.52
2/3/2010 9:10	75.18	2/3/2010 13:20	75.35	2/3/2010 17:50	76.64
2/3/2010 9:11	74.9	2/3/2010 13:21	75.3	2/3/2010 17:51	76.6
2/3/2010 9:12	74.61	2/3/2010 13:22	75.29	2/3/2010 17:52	76.58
2/3/2010 9:13	74.78	2/3/2010 13:23	74.81	2/3/2010 17:53	76.53
2/3/2010 9:14	74.91	2/3/2010 13:24	74.9	2/3/2010 17:54	76.51
2/3/2010 9:15	75.01	2/3/2010 13:25	74.99	2/3/2010 17:55	76.55
2/3/2010 9:16	74.94	2/3/2010 13:26	75.1	2/3/2010 17:56	76.54
2/3/2010 9:17	74.79	2/3/2010 13:27	75.5	2/3/2010 17:57	76.15
2/3/2010 9:18	74.79	2/3/2010 13:28	75.35	2/3/2010 17:58	75.65
2/3/2010 9:19	74.79	2/3/2010 13:29	75.33	2/3/2010 17:59	75.95
2/3/2010 9:20	75.01	2/3/2010 13:30	75.51	2/3/2010 18:00	75.97
2/3/2010 9:21	75.06	2/3/2010 13:31	75.35	2/3/2010 18:01	75.71
2/3/2010 9:22	75.15	2/3/2010 13:32	75.17	2/3/2010 18:02	75.52
2/3/2010 9:23	75.26	2/3/2010 13:33	75.3	2/3/2010 18:03	75.71
2/3/2010 9:24	74.94	2/3/2010 13:34	75.46	2/3/2010 18:04	75.68
2/3/2010 9:25	75.08	2/3/2010 13:35	75.33	2/3/2010 18:05	75.65
2/3/2010 9:26	75.15	2/3/2010 13:36	75.16	2/3/2010 18:06	75.75
2/3/2010 9:27	75.13	2/3/2010 13:37	75.46	2/3/2010 18:07	75.4
2/3/2010 9:28	75.11	2/3/2010 13:38	75.8	2/3/2010 18:08	75.15
2/3/2010 9:29	75.09	2/3/2010 13:39	75.62	2/3/2010 18:09	75.35
2/3/2010 9:30	75.07	2/3/2010 13:40	75.69	2/3/2010 18:10	75.3
2/3/2010 9:31	74.94	2/3/2010 13:41	76	2/3/2010 18:11	74.99
2/3/2010 9:32	75	2/3/2010 13:42	75.84	2/3/2010 18:12	74.99
2/3/2010 9:33	75.24	2/3/2010 13:43	75.67	2/3/2010 18:13	75.02
2/3/2010 9:34	75.16	2/3/2010 13:44	75.1	2/3/2010 18:14	75.15
2/3/2010 9:35	74.95	2/3/2010 13:45	74.8	2/3/2010 18:15	75.31
2/3/2010 9:36	74.83	2/3/2010 13:46	75.31	2/3/2010 18:16	75.06
2/3/2010 9:37	74.83	2/3/2010 13:47	75.59	2/3/2010 18:17	74.81
2/3/2010 9:38	74.95	2/3/2010 13:48	75.88	2/3/2010 18:18	75
2/3/2010 9:39	75.13	2/3/2010 13:49	75.73	2/3/2010 18:19	75.06
2/3/2010 9:40	75.23	2/3/2010 13:50	75.71	2/3/2010 18:20	74.9
2/3/2010 9:41	75.17	2/3/2010 13:51	75.79	2/3/2010 18:21	75.01
2/3/2010 9:42	75.15	2/3/2010 13:52	75.5	2/3/2010 18:22	74.98
2/3/2010 9:43	75.42	2/3/2010 13:53	75.53	2/3/2010 18:23	74.7
2/3/2010 9:44	75.3	2/3/2010 13:54	75.57	2/3/2010 18:24	74.57
2/3/2010 9:45	74.92	2/3/2010 13:55	75.45	2/3/2010 18:25	74.72
Average	75.08656	Average	75.44918	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	76.92
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

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	0.286
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	0.292
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	0.857
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
5 minutes BB	35
	50

Run 13	Run 14	Run 15	Run 16	Run 17
Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph
Total SUM 250.7954	Total SUM 246.888	Total SUM 250.4597	Total SUM 250.2966	Total SUM 250.5313

Run 13		Run 14		Run 15		Run 16		Run 17	
Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph
2/8/2010 8:30	59.01	2/8/2010 10:20	59.57	2/8/2010 12:20	58.71	2/8/2010 15:30	59.19	2/8/2010 17:07	58.42
2/8/2010 8:31	58.99	2/8/2010 10:21	59.56	2/8/2010 12:21	59.05	2/8/2010 15:31	59.18	2/8/2010 17:08	58.79
2/8/2010 8:32	58.97	2/8/2010 10:22	60.08	2/8/2010 12:22	59.23	2/8/2010 15:32	58.51	2/8/2010 17:09	58.75
2/8/2010 8:33	58.96	2/8/2010 10:23	59.87	2/8/2010 12:23	59.41	2/8/2010 15:33	58.3	2/8/2010 17:10	58.29
2/8/2010 8:34	59.26	2/8/2010 10:24	59.63	2/8/2010 12:24	59.35	2/8/2010 15:34	58.57	2/8/2010 17:11	58.51
2/8/2010 8:35	59.28	2/8/2010 10:25	59.39	2/8/2010 12:25	59.28	2/8/2010 15:35	58.84	2/8/2010 17:12	58.98
2/8/2010 8:36	58.95	2/8/2010 10:26	59.33	2/8/2010 12:26	58.96	2/8/2010 15:36	59.11	2/8/2010 17:13	59.44
2/8/2010 8:37	58.99	2/8/2010 10:27	2.32	2/8/2010 12:27	59.42	2/8/2010 15:37	59.01	2/8/2010 17:14	59.09
2/8/2010 8:38	58.72	2/8/2010 10:28	57.53	2/8/2010 12:28	59.43	2/8/2010 15:38	58.9	2/8/2010 17:15	58.74
2/8/2010 8:39	58.72	2/8/2010 10:29	59.36	2/8/2010 12:29	59.43	2/8/2010 15:39	58.63	2/8/2010 17:16	57.74
2/8/2010 8:40	58.73	2/8/2010 10:30	59.58	2/8/2010 12:30	59.07	2/8/2010 15:40	58.67	2/8/2010 17:17	59.05
2/8/2010 8:41	58.73	2/8/2010 10:31	59.83	2/8/2010 12:31	58.69	2/8/2010 15:41	58.72	2/8/2010 17:18	59.43
2/8/2010 8:42	58.74	2/8/2010 10:32	59.48	2/8/2010 12:32	58.78	2/8/2010 15:42	58.76	2/8/2010 17:19	59.45
2/8/2010 8:43	58.75	2/8/2010 10:33	59.11	2/8/2010 12:33	58.89	2/8/2010 15:43	58.41	2/8/2010 17:20	59.16
2/8/2010 8:44	58.75	2/8/2010 10:34	59.12	2/8/2010 12:34	59.21	2/8/2010 15:44	58.51	2/8/2010 17:21	59.16
2/8/2010 8:45	58.42	2/8/2010 10:35	60.08	2/8/2010 12:35	59.53	2/8/2010 15:45	58.62	2/8/2010 17:22	59.63
2/8/2010 8:46	58.38	2/8/2010 10:36	59.86	2/8/2010 12:36	58.89	2/8/2010 15:46	58.93	2/8/2010 17:23	59.33
2/8/2010 8:47	58.35	2/8/2010 10:37	59.26	2/8/2010 12:37	58.87	2/8/2010 15:47	58.93	2/8/2010 17:24	59.03
2/8/2010 8:48	58.58	2/8/2010 10:38	58.33	2/8/2010 12:38	59.31	2/8/2010 15:48	59.18	2/8/2010 17:25	58.94
2/8/2010 8:49	58.83	2/8/2010 10:39	58.64	2/8/2010 12:39	59.01	2/8/2010 15:49	59.19	2/8/2010 17:26	59.22
2/8/2010 8:50	58.84	2/8/2010 10:40	58.6	2/8/2010 12:40	59.38	2/8/2010 15:50	58.83	2/8/2010 17:27	59.81
2/8/2010 8:51	58.55	2/8/2010 10:41	58.87	2/8/2010 12:41	59.14	2/8/2010 15:51	58.46	2/8/2010 17:28	59.39
2/8/2010 8:52	58.72	2/8/2010 10:42	59.7	2/8/2010 12:42	59.15	2/8/2010 15:52	58.54	2/8/2010 17:29	58.96
2/8/2010 8:53	58.9	2/8/2010 10:43	59.47	2/8/2010 12:43	59.17	2/8/2010 15:53	58.63	2/8/2010 17:30	59.11
2/8/2010 8:54	59.09	2/8/2010 10:44	58.71	2/8/2010 12:44	58.85	2/8/2010 15:54	58.72	2/8/2010 17:31	58.91
2/8/2010 8:55	58.54	2/8/2010 10:45	59.15	2/8/2010 12:45	58.84	2/8/2010 15:55	59.01	2/8/2010 17:32	59.17
2/8/2010 8:56	58.81	2/8/2010 10:46	59.11	2/8/2010 12:46	58.47	2/8/2010 15:56	59.31	2/8/2010 17:33	58.85
2/8/2010 8:57	58.46	2/8/2010 10:47	59.05	2/8/2010 12:47	58.74	2/8/2010 15:57	58.62	2/8/2010 17:34	59.23
2/8/2010 8:58	58.84	2/8/2010 10:48	58.98	2/8/2010 12:48	59.03	2/8/2010 15:58	58.22	2/8/2010 17:35	59.28
2/8/2010 8:59	58.86	2/8/2010 10:49	59.28	2/8/2010 12:49	58.88	2/8/2010 15:59	58.76	2/8/2010 17:36	59.02
2/8/2010 9:00	59.14	2/8/2010 10:50	57.98	2/8/2010 12:50	58.71	2/8/2010 16:00	59.02	2/8/2010 17:37	58.36
2/8/2010 9:01	58.87	2/8/2010 10:51	57.82	2/8/2010 12:51	58.71	2/8/2010 16:01	59.28	2/8/2010 17:38	58.89
2/8/2010 9:02	59.12	2/8/2010 10:52	57.71	2/8/2010 12:52	58.97	2/8/2010 16:02	59.25	2/8/2010 17:39	58.45
2/8/2010 9:03	59.1	2/8/2010 10:53	58.3	2/8/2010 12:53	58.72	2/8/2010 16:03	59.21	2/8/2010 17:40	59.19
2/8/2010 9:04	59.06	2/8/2010 10:54	58.3	2/8/2010 12:54	58.97	2/8/2010 16:04	59.09	2/8/2010 17:41	58.91
2/8/2010 9:05	59.03	2/8/2010 10:55	58.28	2/8/2010 12:55	58.9	2/8/2010 16:05	58.96	2/8/2010 17:42	58.94
2/8/2010 9:06	58.99	2/8/2010 10:56	58.26	2/8/2010 12:56	58.83	2/8/2010 16:06	59.18	2/8/2010 17:43	58.98
2/8/2010 9:07	59.27	2/8/2010 10:57	58.23	2/8/2010 12:57	58.75	2/8/2010 16:07	58.93	2/8/2010 17:44	58.16
2/8/2010 9:08	59.28	2/8/2010 10:58	58.21	2/8/2010 12:58	59.01	2/8/2010 16:08	59.08	2/8/2010 17:45	58.89
2/8/2010 9:09	58.98	2/8/2010 10:59	58.61	2/8/2010 12:59	58.66	2/8/2010 16:09	59.23	2/8/2010 17:46	59.29
2/8/2010 9:10	58.96	2/8/2010 11:00	58.63	2/8/2010 13:00	58.65	2/8/2010 16:10	59.24	2/8/2010 17:47	58.46
2/8/2010 9:11	58.96	2/8/2010 11:01	58.64	2/8/2010 13:01	58.65	2/8/2010 16:11	58.5	2/8/2010 17:48	58.91
2/8/2010 9:12	59.44	2/8/2010 11:02	58.64	2/8/2010 13:02	58.65	2/8/2010 16:12	59.12	2/8/2010 17:49	58.91
2/8/2010 9:13	59.46	2/8/2010 11:03	58.65	2/8/2010 13:03	58.65	2/8/2010 16:13	59.33	2/8/2010 17:50	59.2
2/8/2010 9:14	59.72	2/8/2010 11:04	58.66	2/8/2010 13:04	58.64	2/8/2010 16:14	59.25	2/8/2010 17:51	58.96
2/8/2010 9:15	59.42	2/8/2010 11:05	58.67	2/8/2010 13:05	58.95	2/8/2010 16:15	58.67	2/8/2010 17:52	58.71
2/8/2010 9:16	59.1	2/8/2010 11:06	59.18	2/8/2010 13:06	58.9	2/8/2010 16:16	58.94	2/8/2010 17:53	57.87
2/8/2010 9:17	59.39	2/8/2010 11:07	59.26	2/8/2010 13:07	58.57	2/8/2010 16:17	59.02	2/8/2010 17:54	58.46
2/8/2010 9:18	59.42	2/8/2010 11:08	58.65	2/8/2010 13:08	58.67	2/8/2010 16:18	59.11	2/8/2010 17:55	59.44
2/8/2010 9:19	59.04	2/8/2010 11:09	58.9	2/8/2010 13:09	58.78	2/8/2010 16:19	59.19	2/8/2010 17:56	59.26
2/8/2010 9:20	59.17	2/8/2010 11:10	59.18	2/8/2010 13:10	58.89	2/8/2010 16:20	58.88	2/8/2010 17:57	59.07
2/8/2010 9:21	59.33	2/8/2010 11:11	59.46	2/8/2010 13:11	59	2/8/2010 16:21	58.9	2/8/2010 17:58	58.88
2/8/2010 9:22	59.33	2/8/2010 11:12	59.22	2/8/2010 13:12	58.46	2/8/2010 16:22	58.93	2/8/2010 17:59	58.87
2/8/2010 9:23	59.33	2/8/2010 11:13	59.18	2/8/2010 13:13	58.84	2/8/2010 16:23	59.53	2/8/2010 18:00	59.32
2/8/2010 9:24	59.34	2/8/2010 11:14	59.14	2/8/2010 13:14	58.77	2/8/2010 16:24	58.75	2/8/2010 18:01	59.33
2/8/2010 9:25	59.19	2/8/2010 11:15	59.11	2/8/2010 13:15	58.25	2/8/2010 16:25	57.95	2/8/2010 18:02	59.33
2/8/2010 9:26	59.04	2/8/2010 11:16	59.53	2/8/2010 13:16	58.59	2/8/2010 16:26	58.93	2/8/2010 18:03	58.96
2/8/2010 9:27	59.03	2/8/2010 11:17	59.54	2/8/2010 13:17	58.68	2/8/2010 16:27	58.74	2/8/2010 18:04	58.59
2/8/2010 9:28	59.03	2/8/2010 11:18	59.28	2/8/2010 13:18	58.76	2/8/2010 16:28	59.27	2/8/2010 18:05	58.86
2/8/2010 9:29	59.03	2/8/2010 11:19	59.31	2/8/2010 13:19	58.84	2/8/2010 16:29	59.27	2/8/2010 18:06	59.14
2/8/2010 9:30	58.79	2/8/2010 11:20	59.6	2/8/2010 13:20	58.61	2/8/2010 16:30	58.33	2/8/2010 18:07	59.42
Average	58.98492	Average	58.08164	Average	58.90492	Average	58.89082	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	64.87	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	2/9/2010 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	64.06	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

February 9, 2010

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

Run 18		Run 19		Run 20		Run 21		Run 22	
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
2/9/2010 6:18	0	2/9/2010 8:05	0	2/9/2010 9:55	89	2/9/2010 11:40	268	2/9/2010 13:25	179
2/9/2010 6:19	0	2/9/2010 8:06	0	2/9/2010 9:56	89	2/9/2010 11:41	267	2/9/2010 13:26	179
2/9/2010 6:20	0	2/9/2010 8:07	0	2/9/2010 9:57	89	2/9/2010 11:42	268	2/9/2010 13:27	179
2/9/2010 6:21	0	2/9/2010 8:08	0	2/9/2010 9:58	89	2/9/2010 11:43	267	2/9/2010 13:28	179
2/9/2010 6:22	0	2/9/2010 8:09	0	2/9/2010 9:59	89	2/9/2010 11:44	269	2/9/2010 13:29	179
2/9/2010 6:23	0	2/9/2010 8:10	0	2/9/2010 10:00	89	2/9/2010 11:45	268	2/9/2010 13:30	179
2/9/2010 6:24	0	2/9/2010 8:11	0	2/9/2010 10:01	89	2/9/2010 11:46	267	2/9/2010 13:31	179
2/9/2010 6:25	0	2/9/2010 8:12	0	2/9/2010 10:02	89	2/9/2010 11:47	268	2/9/2010 13:32	179
2/9/2010 6:26	0	2/9/2010 8:13	0	2/9/2010 10:03	89	2/9/2010 11:48	268	2/9/2010 13:33	179
2/9/2010 6:27	0	2/9/2010 8:14	0	2/9/2010 10:04	89	2/9/2010 11:49	268	2/9/2010 13:34	179
2/9/2010 6:28	0	2/9/2010 8:15	0	2/9/2010 10:05	89	2/9/2010 11:50	268	2/9/2010 13:35	179
2/9/2010 6:29	0	2/9/2010 8:16	0	2/9/2010 10:06	89	2/9/2010 11:51	268	2/9/2010 13:36	179
2/9/2010 6:30	0	2/9/2010 8:17	0	2/9/2010 10:07	89	2/9/2010 11:52	268	2/9/2010 13:37	179
2/9/2010 6:31	0	2/9/2010 8:18	0	2/9/2010 10:08	89	2/9/2010 11:53	268	2/9/2010 13:38	179
2/9/2010 6:32	0	2/9/2010 8:19	0	2/9/2010 10:09	89	2/9/2010 11:54	268	2/9/2010 13:39	179
2/9/2010 6:33	0	2/9/2010 8:20	0	2/9/2010 10:10	89	2/9/2010 11:55	268	2/9/2010 13:40	179
2/9/2010 6:34	0	2/9/2010 8:21	0	2/9/2010 10:11	89	2/9/2010 11:56	268	2/9/2010 13:41	179
2/9/2010 6:35	0	2/9/2010 8:22	0	2/9/2010 10:12	89	2/9/2010 11:57	268	2/9/2010 13:42	179
2/9/2010 6:36	0	2/9/2010 8:23	0	2/9/2010 10:13	89	2/9/2010 11:58	267	2/9/2010 13:43	179
2/9/2010 6:37	0	2/9/2010 8:24	0	2/9/2010 10:14	89	2/9/2010 11:59	267	2/9/2010 13:44	179
2/9/2010 6:38	0	2/9/2010 8:25	0	2/9/2010 10:15	89	2/9/2010 12:00	267	2/9/2010 13:45	179
2/9/2010 6:39	0	2/9/2010 8:26	0	2/9/2010 10:16	89	2/9/2010 12:01	267	2/9/2010 13:46	179
2/9/2010 6:40	0	2/9/2010 8:27	0	2/9/2010 10:17	89	2/9/2010 12:02	267	2/9/2010 13:47	179
2/9/2010 6:41	0	2/9/2010 8:28	0	2/9/2010 10:18	89	2/9/2010 12:03	268	2/9/2010 13:48	179
2/9/2010 6:42	0	2/9/2010 8:29	0	2/9/2010 10:19	89	2/9/2010 12:04	267	2/9/2010 13:49	179
2/9/2010 6:43	0	2/9/2010 8:30	0	2/9/2010 10:20	89	2/9/2010 12:05	268	2/9/2010 13:50	179
2/9/2010 6:44	0	2/9/2010 8:31	0	2/9/2010 10:21	89	2/9/2010 12:06	268	2/9/2010 13:51	179
2/9/2010 6:45	0	2/9/2010 8:32	0	2/9/2010 10:22	89	2/9/2010 12:07	268	2/9/2010 13:52	179
2/9/2010 6:46	0	2/9/2010 8:33	0	2/9/2010 10:23	89	2/9/2010 12:08	268	2/9/2010 13:53	179
2/9/2010 6:47	0	2/9/2010 8:34	0	2/9/2010 10:24	89	2/9/2010 12:09	267	2/9/2010 13:54	179
2/9/2010 6:48	0	2/9/2010 8:35	0	2/9/2010 10:25	89	2/9/2010 12:10	267	2/9/2010 13:55	179
2/9/2010 6:49	0	2/9/2010 8:36	0	2/9/2010 10:26	89	2/9/2010 12:11	268	2/9/2010 13:56	179
2/9/2010 6:50	0	2/9/2010 8:37	0	2/9/2010 10:27	89	2/9/2010 12:12	268	2/9/2010 13:57	179
2/9/2010 6:51	0	2/9/2010 8:38	0	2/9/2010 10:28	89	2/9/2010 12:13	268	2/9/2010 13:58	179
2/9/2010 6:52	0	2/9/2010 8:39	0	2/9/2010 10:29	89	2/9/2010 12:14	268	2/9/2010 13:59	179
2/9/2010 6:53	0	2/9/2010 8:40	0	2/9/2010 10:30	89	2/9/2010 12:15	268	2/9/2010 14:00	179
2/9/2010 6:54	0	2/9/2010 8:41	0	2/9/2010 10:31	89	2/9/2010 12:16	268	2/9/2010 14:01	179
2/9/2010 6:55	0	2/9/2010 8:42	0	2/9/2010 10:32	89	2/9/2010 12:17	267	2/9/2010 14:02	179
2/9/2010 6:56	0	2/9/2010 8:43	0	2/9/2010 10:33	89	2/9/2010 12:18	268	2/9/2010 14:03	179
2/9/2010 6:57	0	2/9/2010 8:44	0	2/9/2010 10:34	89	2/9/2010 12:19	268	2/9/2010 14:04	179
2/9/2010 6:58	0	2/9/2010 8:45	0	2/9/2010 10:35	89	2/9/2010 12:20	267	2/9/2010 14:05	179
2/9/2010 6:59	0	2/9/2010 8:46	0	2/9/2010 10:36	89	2/9/2010 12:21	267	2/9/2010 14:06	179
2/9/2010 7:00	0	2/9/2010 8:47	0	2/9/2010 10:37	89	2/9/2010 12:22	267	2/9/2010 14:07	179
2/9/2010 7:01	0	2/9/2010 8:48	0	2/9/2010 10:38	89	2/9/2010 12:23	267	2/9/2010 14:08	179
2/9/2010 7:02	0	2/9/2010 8:49	0	2/9/2010 10:39	89	2/9/2010 12:24	267	2/9/2010 14:09	179
2/9/2010 7:03	0	2/9/2010 8:50	0	2/9/2010 10:40	89	2/9/2010 12:25	267	2/9/2010 14:10	179
2/9/2010 7:04	0	2/9/2010 8:51	0	2/9/2010 10:41	89	2/9/2010 12:26	267	2/9/2010 14:11	179
2/9/2010 7:05	0	2/9/2010 8:52	0	2/9/2010 10:42	89	2/9/2010 12:27	267	2/9/2010 14:12	179
2/9/2010 7:06	0	2/9/2010 8:53	0	2/9/2010 10:43	89	2/9/2010 12:28	267	2/9/2010 14:13	179
2/9/2010 7:07	0	2/9/2010 8:54	0	2/9/2010 10:44	89	2/9/2010 12:29	267	2/9/2010 14:14	179
2/9/2010 7:08	0	2/9/2010 8:55	0	2/9/2010 10:45	89	2/9/2010 12:30	267	2/9/2010 14:15	179
2/9/2010 7:09	0	2/9/2010 8:56	0	2/9/2010 10:46	89	2/9/2010 12:31	267	2/9/2010 14:16	179
2/9/2010 7:10	0	2/9/2010 8:57	0	2/9/2010 10:47	89	2/9/2010 12:32	267	2/9/2010 14:17	179
2/9/2010 7:11	0	2/9/2010 8:58	0	2/9/2010 10:48	89	2/9/2010 12:33	267	2/9/2010 14:18	179
2/9/2010 7:12	0	2/9/2010 8:59	0	2/9/2010 10:49	89	2/9/2010 12:34	267	2/9/2010 14:19	179
2/9/2010 7:13	0	2/9/2010 9:00	0	2/9/2010 10:50	89	2/9/2010 12:35	266	2/9/2010 14:20	179
2/9/2010 7:14	0	2/9/2010 9:01	0	2/9/2010 10:51	89	2/9/2010 12:36	268	2/9/2010 14:21	179
2/9/2010 7:15	0	2/9/2010 9:02	0	2/9/2010 10:52	89	2/9/2010 12:37	267	2/9/2010 14:22	179
2/9/2010 7:16	0	2/9/2010 9:03	0	2/9/2010 10:53	89	2/9/2010 12:38	267	2/9/2010 14:23	179
2/9/2010 7:17	0	2/9/2010 9:04	0	2/9/2010 10:54	89	2/9/2010 12:39	268	2/9/2010 14:24	179
2/9/2010 7:18	0	2/9/2010 9:05	0	2/9/2010 10:55	89	2/9/2010 12:40	268	2/9/2010 14:25	179
Average	0	Average	0	Average	89	Average	268	Average	179

Run 18		Run 19		Run 20		Run 21		Run 22	
Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value	Date/Time	MPP3 SO2#/MM Value
02/09/2010 06:18	0.427	02/09/2010 08:05		02/09/2010 09:55	0.337	02/09/2010 11:40	0.316	02/09/2010 13:25	0.342
02/09/2010 06:19	0.401	02/09/2010 08:06		02/09/2010 09:56	0.346	02/09/2010 11:41	0.327	02/09/2010 13:26	0.353
02/09/2010 06:20		02/09/2010 08:07		02/09/2010 09:57	0.362	02/09/2010 11:42	0.341	02/09/2010 13:27	0.372
02/09/2010 06:21		02/09/2010 08:08		02/09/2010 09:58	0.363	02/09/2010 11:43	0.350	02/09/2010 13:28	0.389
02/09/2010 06:22		02/09/2010 08:09		02/09/2010 09:59	0.368	02/09/2010 11:44	0.366	02/09/2010 13:29	0.396
02/09/2010 06:23		02/09/2010 08:10	0.354	02/09/2010 10:00	0.375	02/09/2010 11:45	0.381	02/09/2010 13:30	0.400
02/09/2010 06:24		02/09/2010 08:11	0.308	02/09/2010 10:01	0.383	02/09/2010 11:46	0.386	02/09/2010 13:31	0.380
02/09/2010 06:25	0.432	02/09/2010 08:12	0.279	02/09/2010 10:02	0.376	02/09/2010 11:47	0.395	02/09/2010 13:32	0.342
02/09/2010 06:26	0.446	02/09/2010 08:13	0.278	02/09/2010 10:03	0.336	02/09/2010 11:48	0.410	02/09/2010 13:33	0.314
02/09/2010 06:27	0.457	02/09/2010 08:14	0.290	02/09/2010 10:04	0.294	02/09/2010 11:49	0.412	02/09/2010 13:34	0.306
02/09/2010 06:28	0.468	02/09/2010 08:15	0.301	02/09/2010 10:05		02/09/2010 11:50		02/09/2010 13:35	
02/09/2010 06:29	0.477	02/09/2010 08:16	0.314	02/09/2010 10:06		02/09/2010 11:51		02/09/2010 13:36	
02/09/2010 06:30	0.488	02/09/2010 08:17	0.328	02/09/2010 10:07		02/09/2010 11:52		02/09/2010 13:37	
02/09/2010 06:31	0.478	02/09/2010 08:18	0.343	02/09/2010 10:08		02/09/2010 11:53		02/09/2010 13:38	
02/09/2010 06:32	0.437	02/09/2010 08:19	0.354	02/09/2010 10:09		02/09/2010 11:54		02/09/2010 13:39	
02/09/2010 06:33	0.384	02/09/2010 08:20		02/09/2010 10:10	0.303	02/09/2010 11:55	0.319	02/09/2010 13:40	0.358
02/09/2010 06:34	0.360	02/09/2010 08:21		02/09/2010 10:11		02/09/2010 11:56	0.333	02/09/2010 13:41	0.372
02/09/2010 06:35		02/09/2010 08:22		02/09/2010 10:12		02/09/2010 11:57	0.346	02/09/2010 13:42	0.388
02/09/2010 06:36		02/09/2010 08:23		02/09/2010 10:13		02/09/2010 11:58	0.348	02/09/2010 13:43	0.393
02/09/2010 06:37		02/09/2010 08:24		02/09/2010 10:14		02/09/2010 11:59	0.359	02/09/2010 13:44	0.396
02/09/2010 06:38		02/09/2010 08:25	0.358	02/09/2010 10:15		02/09/2010 12:00	0.367	02/09/2010 13:45	0.366
02/09/2010 06:39		02/09/2010 08:26	0.324	02/09/2010 10:16		02/09/2010 12:01	0.383	02/09/2010 13:46	0.329
02/09/2010 06:40	0.411	02/09/2010 08:27	0.304	02/09/2010 10:17		02/09/2010 12:02	0.397	02/09/2010 13:47	0.313
02/09/2010 06:41	0.424	02/09/2010 08:28	0.303	02/09/2010 10:18		02/09/2010 12:03	0.414	02/09/2010 13:48	0.312
02/09/2010 06:42	0.434	02/09/2010 08:29	0.311	02/09/2010 10:19		02/09/2010 12:04	0.415	02/09/2010 13:49	0.317
02/09/2010 06:43	0.447	02/09/2010 08:30	0.320	02/09/2010 10:20		02/09/2010 12:05		02/09/2010 13:50	
02/09/2010 06:44	0.451	02/09/2010 08:31	0.340	02/09/2010 10:21		02/09/2010 12:06		02/09/2010 13:51	
02/09/2010 06:45	0.448	02/09/2010 08:32	0.342	02/09/2010 10:22		02/09/2010 12:07		02/09/2010 13:52	
02/09/2010 06:46	0.440	02/09/2010 08:33	0.350	02/09/2010 10:23		02/09/2010 12:08		02/09/2010 13:53	
02/09/2010 06:47	0.410	02/09/2010 08:34	0.355	02/09/2010 10:24		02/09/2010 12:09		02/09/2010 13:54	
02/09/2010 06:48	0.382	02/09/2010 08:35		02/09/2010 10:25		02/09/2010 12:10	0.404	02/09/2010 13:55	0.388
02/09/2010 06:49	0.374	02/09/2010 08:36		02/09/2010 10:26		02/09/2010 12:11	0.419	02/09/2010 13:56	0.400
02/09/2010 06:50		02/09/2010 08:37		02/09/2010 10:27		02/09/2010 12:12	0.398	02/09/2010 13:57	0.408
02/09/2010 06:51		02/09/2010 08:38		02/09/2010 10:28		02/09/2010 12:13	0.336	02/09/2010 13:58	0.380
02/09/2010 06:52		02/09/2010 08:39		02/09/2010 10:29		02/09/2010 12:14	0.304	02/09/2010 13:59	0.333
02/09/2010 06:53		02/09/2010 08:40	0.350	02/09/2010 10:30		02/09/2010 12:15	0.306	02/09/2010 14:00	0.306
02/09/2010 06:54		02/09/2010 08:41	0.307	02/09/2010 10:31	0.364	02/09/2010 12:16	0.314	02/09/2010 14:01	0.304
02/09/2010 06:55	0.414	02/09/2010 08:42	0.293	02/09/2010 10:32	0.398	02/09/2010 12:17	0.321	02/09/2010 14:02	0.308
02/09/2010 06:56	0.427	02/09/2010 08:43	0.296	02/09/2010 10:33	0.408	02/09/2010 12:18	0.336	02/09/2010 14:03	0.317
02/09/2010 06:57	0.426	02/09/2010 08:44	0.305	02/09/2010 10:34	0.403	02/09/2010 12:19	0.348	02/09/2010 14:04	0.326
02/09/2010 06:58	0.434	02/09/2010 08:45	0.303	02/09/2010 10:35		02/09/2010 12:20		02/09/2010 14:05	
02/09/2010 06:59	0.445	02/09/2010 08:46	0.297	02/09/2010 10:36		02/09/2010 12:21		02/09/2010 14:06	
02/09/2010 07:00	0.419	02/09/2010 08:47	0.312	02/09/2010 10:37		02/09/2010 12:22		02/09/2010 14:07	
02/09/2010 07:01	0.388	02/09/2010 08:48	0.327	02/09/2010 10:38		02/09/2010 12:23		02/09/2010 14:08	
02/09/2010 07:02	0.360	02/09/2010 08:49	0.342	02/09/2010 10:39		02/09/2010 12:24		02/09/2010 14:09	
02/09/2010 07:03	0.353	02/09/2010 08:50		02/09/2010 10:40	0.311	02/09/2010 12:25	0.404	02/09/2010 14:10	0.389
02/09/2010 07:04	0.359	02/09/2010 08:51		02/09/2010 10:41	0.326	02/09/2010 12:26	0.362	02/09/2010 14:11	0.397
02/09/2010 07:05		02/09/2010 08:52		02/09/2010 10:42	0.336	02/09/2010 12:27	0.322	02/09/2010 14:12	0.376
02/09/2010 07:06		02/09/2010 08:53		02/09/2010 10:43	0.347	02/09/2010 12:28	0.307	02/09/2010 14:13	0.338
02/09/2010 07:07		02/09/2010 08:54		02/09/2010 10:44	0.365	02/09/2010 12:29	0.310	02/09/2010 14:14	0.308
02/09/2010 07:08		02/09/2010 08:55	0.402	02/09/2010 10:45	0.371	02/09/2010 12:30	0.319	02/09/2010 14:15	0.308
02/09/2010 07:09		02/09/2010 08:56	0.378	02/09/2010 10:46	0.371	02/09/2010 12:31	0.328	02/09/2010 14:16	0.316
02/09/2010 07:10	0.396	02/09/2010 08:57	0.323	02/09/2010 10:47	0.383	02/09/2010 12:32	0.337	02/09/2010 14:17	0.322
02/09/2010 07:11	0.409	02/09/2010 08:58	0.276	02/09/2010 10:48	0.388	02/09/2010 12:33	0.349	02/09/2010 14:18	0.330
02/09/2010 07:12	0.419	02/09/2010 08:59	0.269	02/09/2010 10:49	0.403	02/09/2010 12:34	0.360	02/09/2010 14:19	0.337
02/09/2010 07:13	0.424	02/09/2010 09:00	0.275	02/09/2010 10:50		02/09/2010 12:35		02/09/2010 14:20	
02/09/2010 07:14	0.409	02/09/2010 09:01	0.281	02/09/2010 10:51		02/09/2010 12:36		02/09/2010 14:21	
02/09/2010 07:15	0.365	02/09/2010 09:02	0.297	02/09/2010 10:52		02/09/2010 12:37		02/09/2010 14:22	
02/09/2010 07:16	0.338	02/09/2010 09:03	0.311	02/09/2010 10:53		02/09/2010 12:38		02/09/2010 14:23	
02/09/2010 07:17	0.330	02/09/2010 09:04	0.325	02/09/2010 10:54		02/09/2010 12:39		02/09/2010 14:24	
02/09/2010 07:18	0.338	02/09/2010 09:05		02/09/2010 10:55	0.310	02/09/2010 12:40	0.355	02/09/2010 14:25	0.385

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 18	Run 19	Run 20	Run 21	Run 22
Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph	Coal Flow Coal Flow kpph
Total SUM 221.8482	Total SUM 223.1244	Total SUM 223.9113	Total SUM 225.5203	Total SUM 225.6159

Run 18		Run 19		Run 20		Run 21		Run 22	
Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph	Coal Flow 31	Coal Flow kpph
2/9/2010 6:18	51.17	2/9/2010 8:05	51.81	2/9/2010 9:55	52.21	2/9/2010 11:40	52.55	2/9/2010 13:25	52.67
2/9/2010 6:19	51.16	2/9/2010 8:06	51.83	2/9/2010 9:56	52.17	2/9/2010 11:41	52.41	2/9/2010 13:26	52.64
2/9/2010 6:20	51.15	2/9/2010 8:07	52.1	2/9/2010 9:57	51.92	2/9/2010 11:42	52.28	2/9/2010 13:27	52.39
2/9/2010 6:21	51.14	2/9/2010 8:08	52.09	2/9/2010 9:58	51.94	2/9/2010 11:43	52.3	2/9/2010 13:28	52.65
2/9/2010 6:22	51.14	2/9/2010 8:09	51.77	2/9/2010 9:59	51.98	2/9/2010 11:44	52.53	2/9/2010 13:29	52.67
2/9/2010 6:23	51.44	2/9/2010 8:10	51.49	2/9/2010 10:00	52.32	2/9/2010 11:45	52.31	2/9/2010 13:30	52.92
2/9/2010 6:24	51.21	2/9/2010 8:11	51.76	2/9/2010 10:01	52.62	2/9/2010 11:46	52.11	2/9/2010 13:31	52.92
2/9/2010 6:25	51.79	2/9/2010 8:12	51.77	2/9/2010 10:02	52.31	2/9/2010 11:47	52.13	2/9/2010 13:32	52.9
2/9/2010 6:26	51.51	2/9/2010 8:13	51.78	2/9/2010 10:03	52.38	2/9/2010 11:48	52.44	2/9/2010 13:33	52.58
2/9/2010 6:27	51.76	2/9/2010 8:14	51.79	2/9/2010 10:04	52.13	2/9/2010 11:49	52.44	2/9/2010 13:34	52.79
2/9/2010 6:28	51.75	2/9/2010 8:15	51.8	2/9/2010 10:05	52.36	2/9/2010 11:50	52.47	2/9/2010 13:35	52.44
2/9/2010 6:29	51.74	2/9/2010 8:16	51.82	2/9/2010 10:06	52.13	2/9/2010 11:51	52.71	2/9/2010 13:36	52.75
2/9/2010 6:30	51.75	2/9/2010 8:17	52.06	2/9/2010 10:07	52.15	2/9/2010 11:52	52.71	2/9/2010 13:37	52.75
2/9/2010 6:31	52	2/9/2010 8:18	52.06	2/9/2010 10:08	52.4	2/9/2010 11:53	52.69	2/9/2010 13:38	52.75
2/9/2010 6:32	52.02	2/9/2010 8:19	52.07	2/9/2010 10:09	52.23	2/9/2010 11:54	52.42	2/9/2010 13:39	52.73
2/9/2010 6:33	52.03	2/9/2010 8:20	52.31	2/9/2010 10:10	52.06	2/9/2010 11:55	52.66	2/9/2010 13:40	52.45
2/9/2010 6:34	51.74	2/9/2010 8:21	52.02	2/9/2010 10:11	51.8	2/9/2010 11:56	52.7	2/9/2010 13:41	52.48
2/9/2010 6:35	51.48	2/9/2010 8:22	52.3	2/9/2010 10:12	51.83	2/9/2010 11:57	53.23	2/9/2010 13:42	52.48
2/9/2010 6:36	51.72	2/9/2010 8:23	52.06	2/9/2010 10:13	51.87	2/9/2010 11:58	52.89	2/9/2010 13:43	52.17
2/9/2010 6:37	51.47	2/9/2010 8:24	52.05	2/9/2010 10:14	52.01	2/9/2010 11:59	52.92	2/9/2010 13:44	52.21
2/9/2010 6:38	51.72	2/9/2010 8:25	52.05	2/9/2010 10:15	52.14	2/9/2010 12:00	52.95	2/9/2010 13:45	52.65
2/9/2010 6:39	51.74	2/9/2010 8:26	52.03	2/9/2010 10:16	52.13	2/9/2010 12:01	52.99	2/9/2010 13:46	52.37
2/9/2010 6:40	51.76	2/9/2010 8:27	51.81	2/9/2010 10:17	52.14	2/9/2010 12:02	52.99	2/9/2010 13:47	52.39
2/9/2010 6:41	51.76	2/9/2010 8:28	52.1	2/9/2010 10:18	52.39	2/9/2010 12:03	52.71	2/9/2010 13:48	52.64
2/9/2010 6:42	51.51	2/9/2010 8:29	52.37	2/9/2010 10:19	52.1	2/9/2010 12:04	52.98	2/9/2010 13:49	52.64
2/9/2010 6:43	51.79	2/9/2010 8:30	52.09	2/9/2010 10:20	52.35	2/9/2010 12:05	52.97	2/9/2010 13:50	52.66
2/9/2010 6:44	51.81	2/9/2010 8:31	51.84	2/9/2010 10:21	52.33	2/9/2010 12:06	52.94	2/9/2010 13:51	52.89
2/9/2010 6:45	52.13	2/9/2010 8:32	52.12	2/9/2010 10:22	52.07	2/9/2010 12:07	52.68	2/9/2010 13:52	52.86
2/9/2010 6:46	52.12	2/9/2010 8:33	52.14	2/9/2010 10:23	51.85	2/9/2010 12:08	52.92	2/9/2010 13:53	52.54
2/9/2010 6:47	51.79	2/9/2010 8:34	52.16	2/9/2010 10:24	52.11	2/9/2010 12:09	52.64	2/9/2010 13:54	52.56
2/9/2010 6:48	51.78	2/9/2010 8:35	52.18	2/9/2010 10:25	52.11	2/9/2010 12:10	52.65	2/9/2010 13:55	52.85
2/9/2010 6:49	51.51	2/9/2010 8:36	52.23	2/9/2010 10:26	52.11	2/9/2010 12:11	52.67	2/9/2010 13:56	53.09
2/9/2010 6:50	51.81	2/9/2010 8:37	52.56	2/9/2010 10:27	52.1	2/9/2010 12:12	52.71	2/9/2010 13:57	52.8
2/9/2010 6:51	51.83	2/9/2010 8:38	52.05	2/9/2010 10:28	52.1	2/9/2010 12:13	53.01	2/9/2010 13:58	52.53
2/9/2010 6:52	51.85	2/9/2010 8:39	52.18	2/9/2010 10:29	52.1	2/9/2010 12:14	52.22	2/9/2010 13:59	52.53
2/9/2010 6:53	52.1	2/9/2010 8:40	52.32	2/9/2010 10:30	52.09	2/9/2010 12:15	52.53	2/9/2010 14:00	52.54
2/9/2010 6:54	52.06	2/9/2010 8:41	52.46	2/9/2010 10:31	52.08	2/9/2010 12:16	52.68	2/9/2010 14:01	52.75
2/9/2010 6:55	52.02	2/9/2010 8:42	52.57	2/9/2010 10:32	51.86	2/9/2010 12:17	52.79	2/9/2010 14:02	52.93
2/9/2010 6:56	51.71	2/9/2010 8:43	52.38	2/9/2010 10:33	52.14	2/9/2010 12:18	52.49	2/9/2010 14:03	52.88
2/9/2010 6:57	51.96	2/9/2010 8:44	52.19	2/9/2010 10:34	52.41	2/9/2010 12:19	52.52	2/9/2010 14:04	52.82
2/9/2010 6:58	51.67	2/9/2010 8:45	52.01	2/9/2010 10:35	52.43	2/9/2010 12:20	52.53	2/9/2010 14:05	52.76
2/9/2010 6:59	51.65	2/9/2010 8:46	52.02	2/9/2010 10:36	52.7	2/9/2010 12:21	52.32	2/9/2010 14:06	52.59
2/9/2010 7:00	51.62	2/9/2010 8:47	52.02	2/9/2010 10:37	52.36	2/9/2010 12:22	52.59	2/9/2010 14:07	52.45
2/9/2010 7:01	51.37	2/9/2010 8:48	52.02	2/9/2010 10:38	52.5	2/9/2010 12:23	52.6	2/9/2010 14:08	52.69
2/9/2010 7:02	51.49	2/9/2010 8:49	52.01	2/9/2010 10:39	52.61	2/9/2010 12:24	52.84	2/9/2010 14:09	52.62
2/9/2010 7:03	52.02	2/9/2010 8:50	51.83	2/9/2010 10:40	52.34	2/9/2010 12:25	52.86	2/9/2010 14:10	52.57
2/9/2010 7:04	51.76	2/9/2010 8:51	51.67	2/9/2010 10:41	52.34	2/9/2010 12:26	53.1	2/9/2010 14:11	52.84
2/9/2010 7:05	51.76	2/9/2010 8:52	51.95	2/9/2010 10:42	52.34	2/9/2010 12:27	52.82	2/9/2010 14:12	52.82
2/9/2010 7:06	51.79	2/9/2010 8:53	51.95	2/9/2010 10:43	52.3	2/9/2010 12:28	52.27	2/9/2010 14:13	52.58
2/9/2010 7:07	52.3	2/9/2010 8:54	51.95	2/9/2010 10:44	51.81	2/9/2010 12:29	52.53	2/9/2010 14:14	52.81
2/9/2010 7:08	52.15	2/9/2010 8:55	51.96	2/9/2010 10:45	52.09	2/9/2010 12:30	52.29	2/9/2010 14:15	52.55
2/9/2010 7:09	52.03	2/9/2010 8:56	51.96	2/9/2010 10:46	52.33	2/9/2010 12:31	52.55	2/9/2010 14:16	52.57
2/9/2010 7:10	52.29	2/9/2010 8:57	51.96	2/9/2010 10:47	52.14	2/9/2010 12:32	52.79	2/9/2010 14:17	52.82
2/9/2010 7:11	52.18	2/9/2010 8:58	51.96	2/9/2010 10:48	52.39	2/9/2010 12:33	52.81	2/9/2010 14:18	52.58
2/9/2010 7:12	52.08	2/9/2010 8:59	51.97	2/9/2010 10:49	52.4	2/9/2010 12:34	52.85	2/9/2010 14:19	52.59
2/9/2010 7:13	52.08	2/9/2010 9:00	52	2/9/2010 10:50	52.66	2/9/2010 12:35	53.14	2/9/2010 14:20	52.59
2/9/2010 7:14	52.08	2/9/2010 9:01	52.5	2/9/2010 10:51	52.64	2/9/2010 12:36	52.86	2/9/2010 14:21	52.59
2/9/2010 7:15	52.06	2/9/2010 9:02	52.17	2/9/2010 10:52	52.41	2/9/2010 12:37	52.59	2/9/2010 14:22	52.62
2/9/2010 7:16	51.67	2/9/2010 9:03	51.87	2/9/2010 10:53	52.47	2/9/2010 12:38	52.33	2/9/2010 14:23	52.86
2/9/2010 7:17	51.32	2/9/2010 9:04	52.14	2/9/2010 10:54	52.53	2/9/2010 12:39	52.34	2/9/2010 14:24	52.61
2/9/2010 7:18	51.61	2/9/2010 9:05	52.39	2/9/2010 10:55	52.61	2/9/2010 12:40	52.37	2/9/2010 14:25	52.62
Average	51.75262	Average	52.04721	Average	52.22836	Average	52.64459	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	56.86	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	57.64	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	56.63	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

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]
2/10/2010						
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

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

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	1	2	3
Sum	288.2009589	286.9988732	285.8928767

Ammonia Flow into Side - 31 (North Side)

Set 1 - Run 1	
Date-Time	NH3 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	NH3 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	NH3 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) (1)	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

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 Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

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

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

Test Summary

Maxxam ID FC6951 **Collected** 2010/02/10
Sample ID BLANK-H2SO4 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN1-PROBE/IMP1 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN1-IMP2/IMP3 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN1-IMP2/IMP3 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN2-PROBE/IMP1 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN2-IMP2/IMP3 **Shipped**
Matrix Stack Sampling Train **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

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

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

Test Summary

Maxxam ID FC6956 **Collected** 2010/02/10
Sample ID RUN3-PROBE/IMP1 **Shipped**
Matrix Stack Sampling Train **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 **Collected** 2010/02/10
Sample ID RUN3-IMP2/IMP3 **Shipped**
Matrix Stack Sampling Train **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

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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.

Maxxam Analytics International Corporation o/a Maxxam Analytics: 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

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 yyyy/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.

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Chain of Custody Form - Source

MaxXam Analytics Inc
6740 Campobello Road
Mississauga, ON L5N 2L8
www.maxxamanalytics.com
Toll Free: (800) 563-6266
Phone: (905) 817-5700
Fax: (905) 817-5777

CLIENT INFORMATION SECTION

Company Name: Catalyst Air Management Inc
Project Manager: M. Taylor
e-mail:
Address: 2505 Byington-Solway Road
Knoxville TN 37931
Phone: 865 531-0075 Fax: 865 531-0750
Sampled by: H. Love / D. Urban

ANALYSIS REQUESTED

MAXXAM use only	Field Sample ID	# Bottles	Collection Date	Collection Time	Initial Impinger Charge Volumes (mL)*	CTM-027 NH3
	Run 1 Probe/Imp 1	1	2/10/10		Imp 1 - 100	✓
	Run 1 Imp 2/3	1			Imp 2 - 100 ml Imp 3 - 0	✓
	Run 2 Probe/Imp 1	1			Imp 1 - 100 ml	✓
	Run 2 Imp 2/3	1			Imp 2 - 100 ml Imp 3 - 0	✓
	Run 3 Probe/Imp 1	1			Imp 1 - 100 ml	✓
	Run 3 Imp 2/3	1			Imp 2 - 100 ml Imp 3 - 0	✓
	.1N H_2SO_4 BLANK	1				

TAT Requirement

- STD 10 Business day ☐
- Rush 5 Business day ☐
- Rush 2 Business day ☐
- Rush 1 Business day ☐
- Other (specify):

PROJECT INFORMATION

Project #:
Name: Lakeland - McIntosh 3
PO #:
Maxxam Quote #:
Maxxam Contact:

REPORTING REQUIREMENTS

- Summary Report only ☐
- Summary Report & Full Data Package ☐
- EDD ☐

PROJECT SPECIFIC COMMENTS

CTM-027 NH3 - do not exceed 2 week hold time!

Client Signature:
Affiliation:
Date/Time: 2/10/10 16:30

Received by:
Affiliation:
Date/Time: 10/2/18 1200

*Initial Impinger charge volumes are required before the following analysis can be started: Method 26, CTM-027 & Method 8

Method 23 / TO9A

NATO TEF ☐ TEF x DL ☐ TEF x 0 DL ☐
WHO TEF ☐ TEF x 0.5 DL ☐

SO_3

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(ClO4)2 : Volume (ml)	0.650	0.950	1.875	1.575	1.650
Normality Ba(ClO4)2:	0.00950	0.00950	0.00950	0.00950	0.00950
H2SO4/SO3 (lbs/dscf):	7.12E-08	8.74E-08	2.20E-07	2.40E-07	2.04E-07
PPM (as SO3)	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 CEMS Time	Avg. Flow	Heating Value BTU/#	Avg. HI MMBtu/hr	Sulfur %
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 Manometer Setting (ΔH) In. H_2O	Standard Test Meter Start: End:	(V_w) ft^3	Dry Gas Meter Start: End:	(V_d) ft^3	Standard Test Meter (T_w) °F	Dry Gas Meter Inlet (T_{di}) °F	Outlet (T_{do}) °F	Average (T_d) °F	Barometric Pressure (P_b) in. of Hg	Time (Time) min.	Y_i	ΔH@i	Q_m	K_m
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											

Average: **1.02** **1.79**

FORMULAS

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

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

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

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

Catalyst Air Management, Inc.

POST-TEST METER BOX CALIBRATION

METER BOX NUMBER: 013
DATE: 2/16/2010
CALIBRATED BY: Urban

PRETEST Y_i: 1.02
POST-TEST Y_i: 1.01
BENCH METER CALIBRATION FACTOR: 1.000 DIFFERENCE, % -0.50

Orifice Manometer Setting (ΔH) In. H_2O	Standard Test Meter Start: End:	(V_w) ft^3	Dry Gas Meter Start: End:	(V_d) ft^3	Standard Test Meter (T_w) °F	Dry Gas Meter Inlet (T_{di}) °F	Outlet (T_{do}) °F	Average (T_d) °F	Barometric Pressure (P_b) in. of Hg	Time (Time) min.	Y_i	$\Delta H@i$	Q_m	K_m
0.75	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

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

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

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

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

Catalyst Air Management, Inc.

POST-TEST METER BOX CALIBRATION

METER BOX NUMBER: 013
DATE: 2/16/2010
CALIBRATED BY: Urban

PRETEST Y_i: 1.02
POST-TEST Y_i: 1.01
BENCH METER CALIBRATION FACTOR: 1.000 DIFFERENCE, % -0.56

Orifice Manometer Setting (Δ H) In. H_2O	Standard Test Meter Start: End:	(V_w) ft^3	Dry Gas Meter Start: End:	(V_d) ft^3	Standard Test Meter (T_w) °F	Dry Gas Meter Inlet (T_{di}) °F	Dry Gas Meter Outlet (T_{do}) °F	Dry Gas Meter Average (T_d) °F	Barometric Pressure (P_b) in. of Hg	Time (Time) min.	Y_i	ΔH@i	Q_m	K_m
1.50	810.815	7.031	370.481	6.989	52.0	57.0	57.0	57.0	29.19	10.00	1.01	1.73	0.699	0.730
	817.846		377.470											
1.50	817.846	7.121	377.470	7.102	52.0	58.0	57.0	57.5	29.19	10.00	1.01	1.68	0.710	0.741
	824.967		384.572											
1.50	824.967	7.136	384.572	7.103	52.0	59.5	57.0	58.3	29.19	10.00	1.01	1.69	0.709	0.740
	832.103		391.675											

Average: **1.01** **1.70**

FORMULAS

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

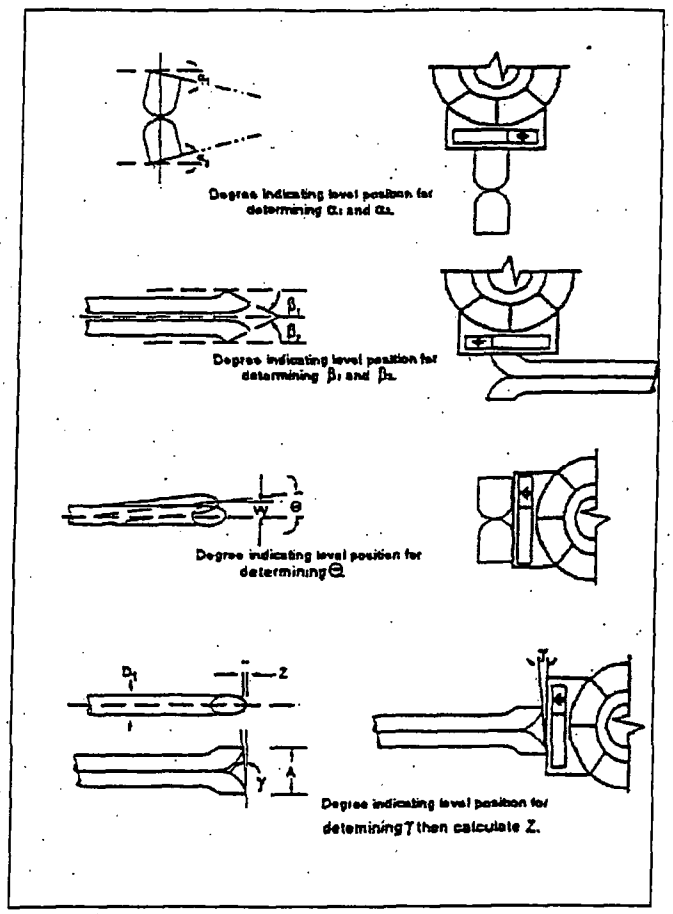
$$\Delta H@i = \frac{0.9244}{K_m^{\,2}}$$

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

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

CATALYST AIR MANAGEMENT, INC. (865) 531-0075
Air Quality Testing Services (865) 531-0750 Fax
2505 Byington-Solway Road
Knoxville, TN 37931

"S" TYPE PITOT TUBE CALIBRATION – INSPECTION



ATTRIBUTE	
Level and Perpendicular?	Yes
Obstructed?	No
Damaged?	No
α_1 ($-10° \le \alpha_1 \le +10°$)	0°
α_2 ($-10° \le \alpha_2 \le +10°$)	0°
β_1 ($-5° \le \beta_1 \le +5°$)	1°
β_2 ($-5° \le \beta_2 \le +5°$)	2°
γ	0°
θ	0°
$Z = A \tan \gamma$ ($\le 0.125"$)	0
$W = A \tan \theta$ ($\le 0.0.03125"$)	0
D_1 ($3/16" \le D_1 \le 3/8"$)	.370
A	1.10
$A/2D_1$ ($1.05 \le P_A/D_1 \le 1.5$)	1.486

QA / QC Check
Completeness ✓ Legibility ✓ Accuracy ✓ Specifications ✓ Reasonableness ✓

Certification:
I certify that the Type "S" pitot tube / probe. ID# CAM 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: _____ 5/1/09 Team Leader _____ 2/9/10
Personnel (Signature / Date) 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

1ST	2ND	3RD	AVG
0.185	0.185	0.185	0.185

Nozzle No. _____

1ST	2ND	3RD	AVG

Nozzle No. _____

1ST	2ND	3RD	AVG

Nozzle No. _____

1ST	2ND	3RD	AVG

Nozzle No. _____

1ST	2ND	3RD	AVG

Nozzle No. _____

1ST	2ND	3RD	AVG

Calibrated By: R. Devera
Date: 2-10-10

CATALYST AIR MANAGEMENT, INC

K-TYPE THERMOCOUPLE CALIBRATION

Post Test Calibration Check
Lakeland Electric - McIntosh 3

DATE: 2/16/2010
CALIBRATED BY: Kelly

AVG STACK TEMPERATURE: 138

Thermocouple No:	**CAM 20**
Std Therometer	133
Thermocouple	135
Difference	2
Difference % Absolute	-0.3
Acceptance Criteria %	1.5

Calibration Gas Certification Sheets

PRAXAIR

Praxair Distribution Mid-Atlantic LLC

145 Shimersville Road • Bethlehem, PA 18015 • Phone: 610.317.1608 • Fax: 610.758.8384

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:
PDI WHSE KNOXVILLE HUB
3020 E INDUSTRIAL PKWY
KNOXVILLE TN 37921

DocNumber: 00000009807
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

1. This cylinder was certified according to the 1997 EPA Traceability Protocol, document #EPA-600/R-97/121, using procedure G1
2. 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: GMIS
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	C: 9.91	R: 11.51	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	C: 0	R: 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: GMIS
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	C: 12.44	R: 23	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	C: 0	R: 0	Conc: 0				
UOM: %		Mean Test Assay:	0 %				

Analyzed by: Melissa Santana

Certified by: JM-L 9/24/09

PRAXAIR

Praxair Distribution Mid-Atlantic LLC

145 Shimersville Road • Bethlehem, PA 18015 • Phone: 610.317.1608 • Fax: 610.758.8384

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

Customer & Order Information:
PDI WHSE KNOXVILLE HUB
3020 E INDUSTRIAL PKWY
KNOXVILLE TN 37921

DocNumber: 00000009804
Order Number: 190671600 - 6
Customer P. O. Number:
Customer Reference Number: LB216

Fill Date: 9/21/2009
Part Number: EV NICD0XE113AS
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:* 36 Months *Expiration Date:* 9/28/2012

1. This cylinder was certified according to the 1997 EPA Traceability Protocol, document #EPA-600/R-97/121, using procedure G1
2. 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: GMIS
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 S/N F1-111
Analytical Method: PARAMAGNETIC
Last Multipoint Calibration: 9/3/2009

Reference Standard Type: GMIS
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: 9/29/09

APPENDIX 6
SAMPLE CALCULATIONS

SAMPLE EQUATIONS FOR ISOKINETIC SAMPLING

CALCULATIONS FOR FLUE GAS VOLUME AND ISOKINETIC RATIO

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

1. D_n = Nozzle Diameter (inches)

1a. A_n = Area of Nozzle (ft^2)

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 (Ft^3)

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

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

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

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

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 H_2O Silica gel + ml Imp. H_2O = 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 =

$$\frac{\left[(\%O_2) - 0.5(\%CO)\right]}{\left[0.264(\%N_2)\right] - \left[(\%O_2) - 0.5(\%CO)\right]} x100$$

14. Molecular weight of wet flue gas

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

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

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

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)

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

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

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

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

$K_4 = 0.09450$
$\Theta = time(\text{min})$

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

II. Calculations for emission rates (Ammonia)

23. Volume of gas sample, standard conditions, L, Vm_{std}

$$Vm_{std}\ L = 28.316*(Vm_{std})$$

24. Volume of ammonia gas, L

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

Va = 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_{NH3}

$$C_{NH3} = (Va/Vm_{std}) * 10^6$$

III. Calculations for concentration and emission rates

36. SO_2/H_2SO_4 (gr/DSCF)

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

37. SO_2/H_2SO_4 at stack conditions (gr/ACF)

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

38. SO_2/H_2SO_4 (lbs/hr), concentration method

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

39. SO_2/H_2SO_4 (lbs/mmBtu)

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

40. SO_2/H_2SO_4 (lbs/ton)

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

41. SO_2/H_2SO_4 (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. SO_2/H_2SO_4 (lbs/mmBtu), F-Factor Method (Continued)

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

Run 1 NH3

CALCULATION QUALITY ASSURANCE CHECK

$$V_{msld} = \frac{(17.64)(1.02)(38.437)(29.85 + 1.333/13.6)}{(55+460)} = 40.232$$

$V_w = 0.0471(84.3) = 3.9705$

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

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

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

$M_s = 30.15(1 - 0.0898) + 18(0.0898) = 29.06$

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

$T_s = 460 + 137 = 597$

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

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

$$\%I = \frac{(0.09450)(597)(40.232)}{(1-0.0898)(60)(29.80)(71.3)(1.867\times10^{-4})} = 104.7$$

$C_{probe/Inp1} = (154/300)(0.30)(24.04)/18000 = 2.00\times10^{-5}$

$Inp\,2\&3 = (13/250)(0.25)(24.04)/18000 = 1.74\times10^{-5}$

$ppm_{probe/Inp1} = [(2.00\times10^{-5})/(40.232)(28316)]\,10^6 = 0.02$

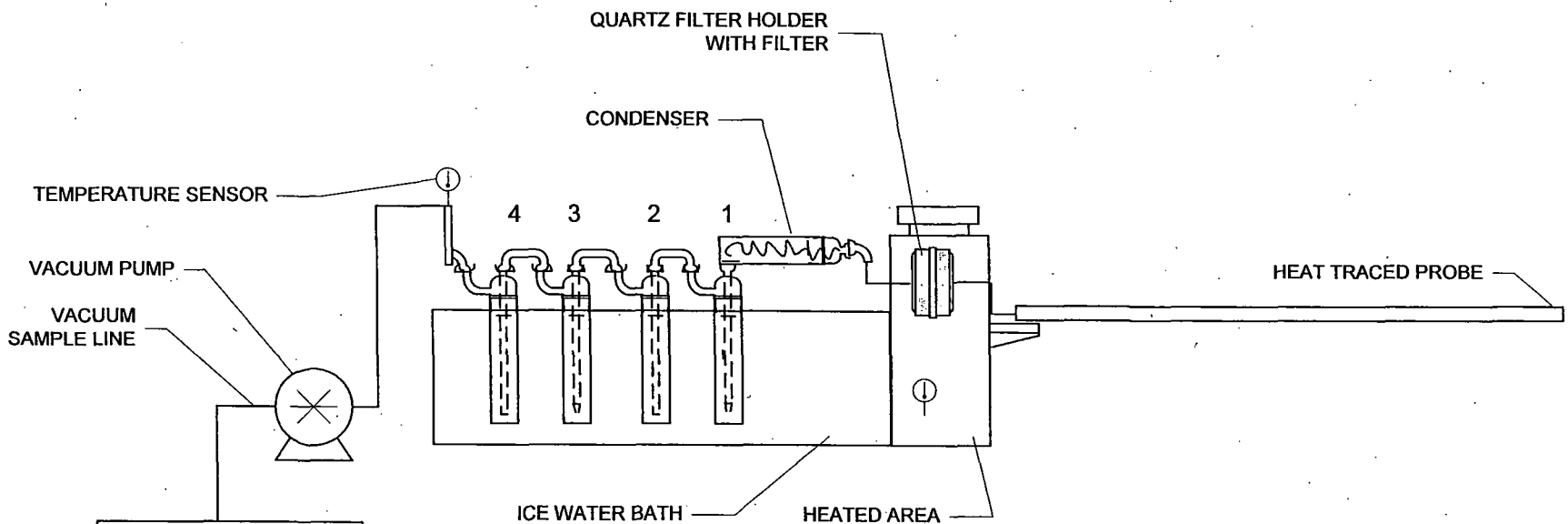
$Inp\,2\&3 = [(1.74\times10^{-5})/(40.232)(28316)]\,10^6 = 0.02$

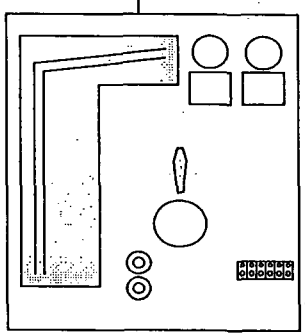
$total = [(2.00\times10^{-5}) + (1.74\times10^{-5})/(40.232)(28316)]\,10^6 = 0.03$

$total\ @3\%O_2 = 0.03(17.9/(20.9-6.6)) = 0.04$

APPENDIX 7
FIGURES

CATALYST
AIR MANAGEMENT, INC.





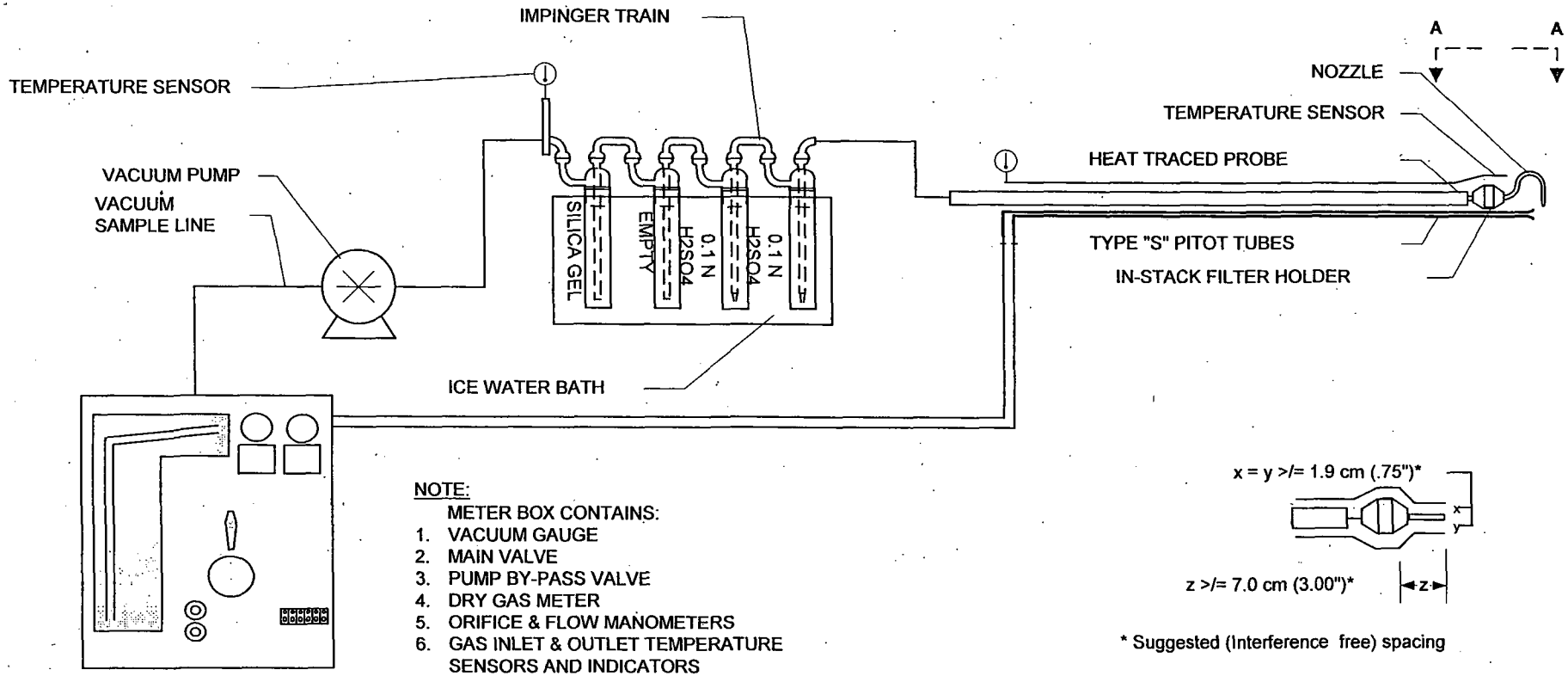
GAS SAMPLING METER BOX

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

***IMPINGER CONTENTS**
Condenser Coil
1 3% H202 - 100ml
2 3% H2O2 - 100mi
3 DI Water - 100ml
4 Silical Gel

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

CATALYST
AIR MANAGEMENT, INC.



GAS SAMPLING METER BOX

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

* Suggested (Interference free) spacing

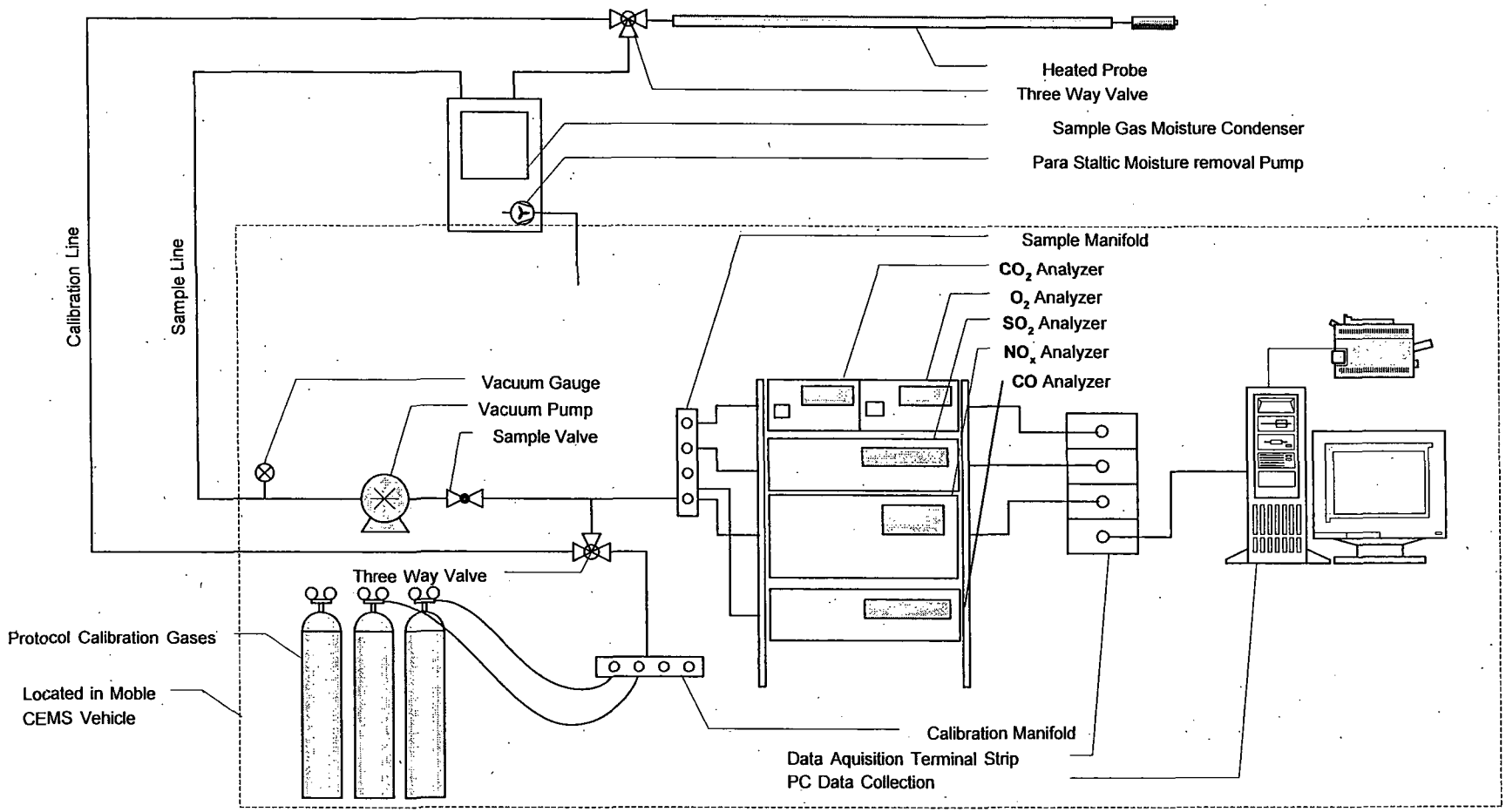
Section A-A
Scale: NONE

*IMPINGER CONTENTS

1	100 ml 0.1 H2SO4
2	100 ml 0.1 H2SO4
3	Empty
4	250 g Silica Gel

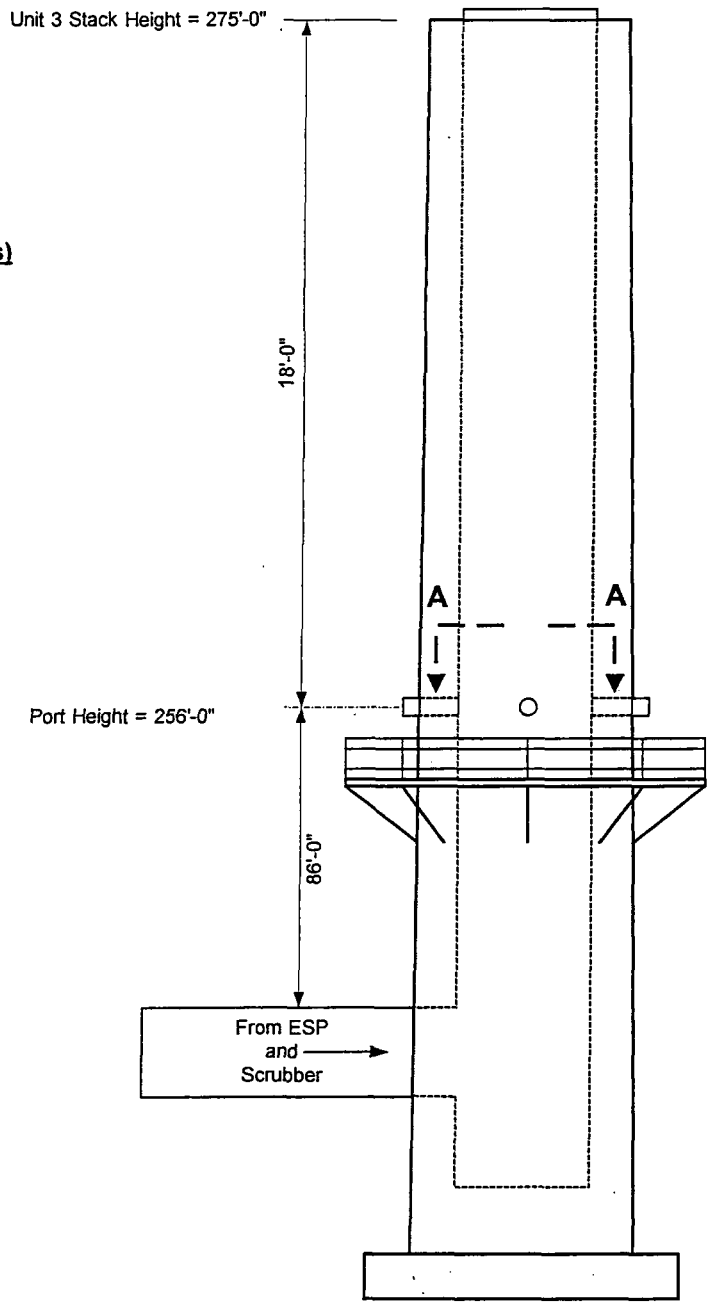
TITLE: EPA METHOD 027 SAMPLING TRAIN		
DESCRIPTION: **AMMONIA SAMPLE TRAIN**		DATE: 07-05-99
SCALE: NONE	DRAWN BY: MJ Taylor	REVISED:

CATALYST
AIR MANAGEMENT, INC.



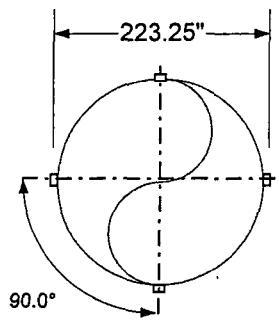
TITLE: EPA INSTRUMENTAL SAMPLE TRAIN		
DESCRIPTION: SAMPLE TRAIN SCHEMATIC		DATE: 01-26-98
SCALE: NONE	DRAWN BY: RF COBB	REVISED:

CATALYST
AIR MANAGEMENT, INC.



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

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