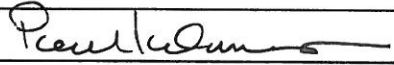


FACILITY INFORMATION

Facility Name: Sugarcane Grower Coop		
ARMS ID No.: 0990026	Air Permit No.: 0990026-016-AV	Expires: November 27, 2016
Facility Contact: Kathleen Lockhart		Title: Manager Environmental Affairs
Phone: 561-996-4779, 561-261-1627		

INSPECTION SUMMARY

Inspection Date: 12/14/2011	Inspector: Paul Kalamaras	
Report Date:	Signature: 	
Inspection Type: INS3	Inspection Subtype: Boiler 4 Stack Test	
Compliance Status: <u>IN</u>	ARMS Updated:	Approval/Date:
Compliance Test was conducted by: South Florida Environmental		

Emission Unit Inspection Details	EU: 004	Compliance Status: <input checked="" type="checkbox"/> IN <input type="checkbox"/> MNC <input type="checkbox"/> SNC
----------------------------------	---------	---

Inspection Observations and Comments:

Boiler 4 Parameters at time of inspection: Fuel: Bagasse

Parameters	Units	Observation
Average Steam Flow	lb/hr	267,000
Steam Temperature	Deg F.	577
Steam Pressure	Psi	388

Scrubber Parameters:

North _____ Scrubber:

Parameters	Units	Observation	CAM Plan Requirement	Compliance Status
Delta P (ΔP)	in. of water	7.0	Above 4.1" (North)	IN
Water flow	GPM	325	Above 252 gpm (both combined)	IN
Pressure	PSI	55		IN

South _____ Scrubber:

Parameters	Units	Observation	CAM Plan Requirement	Compliance Status
Delta P (ΔP)	in. of water	5.7	Above 4.3" (South)	IN
Water flow	GPM	326	Above 252 gpm (both combined)	IN
Pressure	PSI	55		IN

Preliminary results from the 1ST Run of the stack test conducted on 12/14/2011 :

Parameters	Units	Actual Emissions	Emissions Limits
PM	Lb/MMBtu	0.12	0.20 (carbonaceous fuel) + 0.10 (fossil fuel)
NOx	Lb/MMBtu	0.22	0.45 (bagasse), 0.65 (burning residue)
VOC	Lb/MMBtu	0.44	0.7

VE Test: _____

Emission Unit Inspection Details

EU: 004

Compliance Status:



IN



MNC



SNC

Inspection Observations and Comments:**Inspection Checklist:**

- Nozzle Calibration Check before or between runs. Must be 3 measurements within 0.004 inches. ()
- Filter box Temperature. 248F +/- 25F. (observed 248 Deg F)
- Impinger moisture collected correctly. (YES)
- System leak check. Leak test <0.02cfm acceptable. (0.003)
- Blow through pitot lines. (YES)
- Sampling ports sealed check. (YES)
- Check impinger water weigh in and water temperature. (52)

Additional Comments:

Snapshot of boiler parameters were provided for all boilers from computer control room.

Misc. Other data.

Test Run#1

Other parameters during test

- Delta P H2O Ranged from ~ 0.58 to 0.80
- Delta H H2O ranged from ~1.59 to 2.11.
- Gas Meter Temp was 89 deg.

-Performed Spot Check VE for 12 minutes, Plumes combined at times. VE Form included with inspection sheet. VE % ranged from 5 to 20% with combined plumes. Boiler 4 Plume looked Good. No Unusual visible black or grey plume for Boiler #1,2,3,4,5. Boiler 8 only occasional brief for 5 secs. greyish puff for a few times during the 12 minute VE spot check.

Steam Plumes with the normal white faint smoke trail downwind. Combined plumes looked Normal with normal white faint smoke trail.

Boiler 1

Boiler Parameters:
Average Steam Flow = 109,000 lb/hr
Steam Temperature = 577 F
Steam Pressure = 391 psi

Scrubber Parameters:
Delta P = 6.1 in of water
Water Flow = 155 gpm
Pressure = 63 psi

Boiler 5

Boiler Parameters:
Average Steam Flow = 138,000 lb/hr
Steam Temperature = 596 F
Steam Pressure = 404 psi

Scrubber Parameters:
Delta P = 6.0 (North), 5.4 (South) in of water
Water Flow = 322 (combined both) gpm
Pressure = 48 psi

Boiler 2

Boiler Parameters:
Average Steam Flow = 120,000 lb/hr
Steam Temperature = 584 F
Steam Pressure = 389 psi

Scrubber Parameters:
Delta P = 6.2 in of water
Water Flow = 153 gpm
Pressure = 63 psi

Boiler 8

Boiler Parameters:
Average Steam Flow = 238,000 lb/hr
Steam Temperature = 587 F
Steam Pressure = 404 psi

Scrubber Parameters:
Delta P = 7.5 (North), 8.6 (South) in of water
Water Flow = 162 (North), 155 (South) gpm
Pressure = 49 psi

Boiler 3

Boiler Parameters:
Average Steam Flow = 91,000 lb/hr
Steam Temperature = 540 F
Steam Pressure = 388 psi

Scrubber Parameters:
Delta P = 6.3 in of water
Water Flow = 135 gpm
Pressure = 65 psi

Boiler 4

Boiler Parameters:
Average Steam Flow = 253,000 lb/hr
Steam Temperature = 580 F
Steam Pressure = 392 psi

Scrubber Parameters:
Delta P = 6.8 (North), 5.3 (South) in of water
Water Flow = 326 (combined both) gpm
Pressure = 55 psi

Other Comments:

Boilers #1, #2, #3, #5 & #8 were operating using Bagasse Fuel only,

The air compliance test was being conducted at Boiler #4.

The Scrubber parameters, including Delta P (in. of H₂O) and Water Flow (GPM) for all the boilers were within the CAM plan requirements.

EPA
 VISIBLE EMISSION OBSERVATION FORM 1

Method Used (Circle One)
 Method 9 203A 203B Other _____

Company Name US SUGAR CORP
 Facility Name _____
 Street Address _____
 City Belle Glade State FL Zip 33430

Process Boiler Unit # 4 Operating Mode 235,000 lb
 Control Equipment Wet Scrubber Operating Mode _____

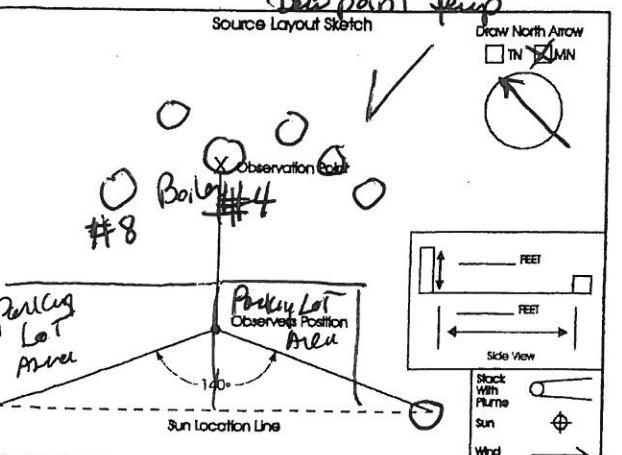
Describe Emission Point
Circular stack

Height of Emiss. Pt. Start 180' End 180' Height of Emiss. Pt. Rel. to Observer Start 180' End 180'
 Distance to Emiss. Pt. Start 263m End 263m Direction to Emiss. Pt. (Degrees) Start 041° End 041°

Vertical Angle to Obs. Pt. Start 13° End 13° Direction to Obs. Pt. (Degrees) Start 041° End 041°
 Distance and Direction to Observation Point from Emission Point Start 263m 041° End 263m 041°

Describe Emissions
 Start White emission / water vapor trail
 Emission Color Start white End white Water Droplet Plume Attached Detached None

Describe Plume Background
 Start Sky Blue (some slight haze) End _____
 Background Color Start sky End sky Sky Conditions Start bc End bc
 Wind Speed Start 12 End 10 Wind Direction Start ENE End ESE
 Ambient Temp. Start 77 End 77 Wet Bulb Temp. Start 61 End 59%
 RH Percent _____



Longitude _____ Latitude _____ Declination _____

Additional Information _____

Form Number _____ Page _____ of _____
 Continued on VEO Form Number _____

Observation Date	Time Zone	Start Time	End Time	Comments
12/14/11	EST	10:20	10:32	
1	15	10	10	OCLP Combined Plumes (#8) #4, 1, 2+3, 5 ↓ own Boiler purf
2	10	5	5	
3	10	10	10	
4	10	15	5	
5	10	5	10	
6	10	15	10	
7	5	10	10	
8	5	5	10	
9	10	15	10	
10	15	10	10	
11	15	5	10	
12	15	10	5	
13				
14				
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26				
27				
28				
29				
30				

Observer's Name (Print) PAUL KALAMARIS
 Observer's Signature _____ Date 12/14/11
 Organization PRC Health Dept
 Certified By ETA Date 12/14/11

**SUGAR CANE GROWERS COOPERATIVE - BELLE GLADE, FLORIDA
2011 EMISSION COMPLIANCE TEST PROGRAM**

SUMMARY OF TEST RESULTS - BOILER #4

	4-comp-R1 14-Dec-11	4-comp-R2 14-Dec-11	4-comp-R3 40891.00	Test Average	
START TIME	10:37				
END TIME	11:44				
STEAM FLOW (Lb/Hr)	258000			258000	
HEAT INPUT (MMBTu/Hr)	495.8			496	
STACK TEMP (F)	158.9			158.9	
MOISTURE	33.78%			33.78%	
O2 (%)	7.95			7.95	
CO2 (%)	11.13			11.13	
ISOKINETICS (%)	108.45			108.45	
VELOCITY (FPS)	51.34			51.34	
FLOW (DSCFH)	7676907			7676907	
FLOW (DSCFM)	127948			127948	
FLOW (ACFM)	216417			216417	
Particulate (Method 5)					Limit (s)
lb/hr	59.45			29.72	92.4
lb/MMBTu	0.120			0.120	0.20
—					
Allowable PM					
lb/hr	92.90			92.900	
lb/MMBTu					
NOx (Method 7E)					
ppm	120.87			120.87	
lb/hr	110.52			110.52	
lb/MMBTu	0.22			0.22	0.45
—					
VOC (Method 25A)					
ppm	685.57			685.57	
lb/hr	218.53			218.53	
lb/MMBTu	0.44			0.44	0.7
—					
Comments					

Primary Server Is Active

Overview

BOILER NO. 1



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main

600# Steam

HEADER
393 PSI

WEST MILL	EAST MILL
259 KPPH	262 KPPH

150 HDR	150 HDR
19 KPPH	144 PSI

TODAY	YESTERDAY
142 KP	458 KP

TODAY
629 KP
YESTERDAY
2311 KP

STEAM
577 °F
109 KPPH
391 PSI

FEEDWTR
113 KPPH

Feedwater

BOILER OUT

4.4 %

590 °F

-1.6 IN

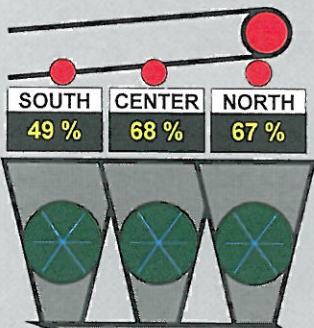
START

STOP

0 KP

RESET

4160 VOLT MOTOR LOCAL VFD RUN



FURNACE

-0.60 IN

725 °F

DRUM

-0.1 IN

400 PSI

AH AIR OUT

389 °F

-3.5 IN

WB-SOUTH

0.2 IN

320 SCFM

WB-NORTH

-0.1 IN

625 SCFM

AH GAS OUT

408 °F

D/P

6.1 IN

SCRUBBER

155 GPM

31 %

FUEL OIL

57 PSI

203 °F

OFA

24.1 IN

DC OUT

-8.1 IN

DISTRIB

18.9 IN

TOTAL AF

1.1 IN

STOKER

0.3 IN

UG AIR

-7 KPPH

FD FAN OUT

3.5 IN

TANK LEVEL

82 %

TANK FLOW

1689 GPM

65 %

BAGASSE

TREND

96 TPH

133 TPH

Grate

DEAERATOR

Boiler 1

Faceplates

Faceplates2

Trending

Alarming

Diagnostics

Genius Bus

Common

Cmn Trends

Primary Server Is Active

Overview

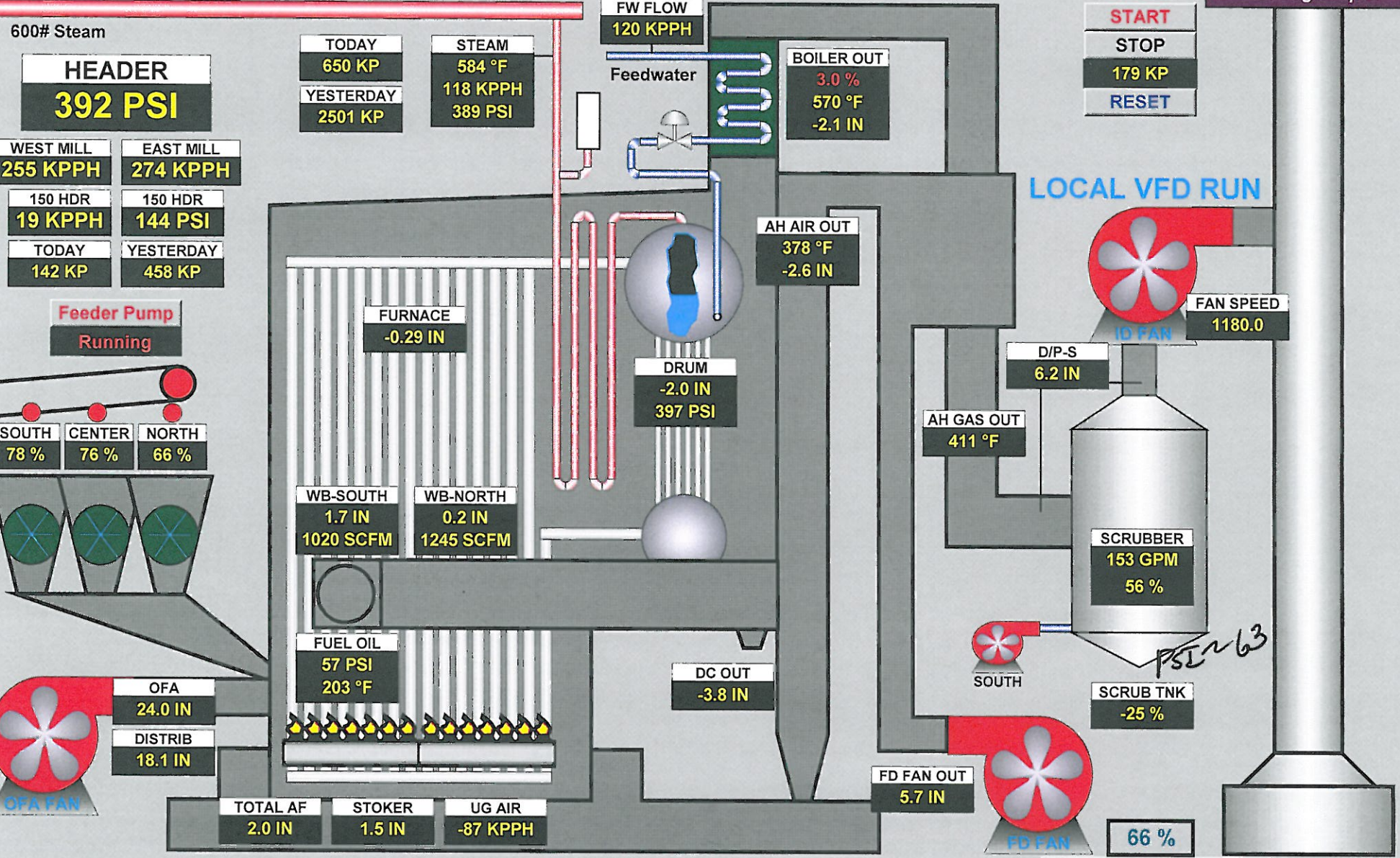
BOILER NO. 2



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main



BAGASSE

113 TPH

154 TPH

Grate

DEAERATOR

- Boiler 2
- Faceplates
- Faceplates2
- Trending
- Alarming
- Diagnostics
- Genius Bus
- Common
- Cmn Trends

Primary Server Is Active

Overview

BOILER NO. 3



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main

600# Steam

HEADER 392 PSI

WEST MILL
255 KPPH

EAST MILL
261 KPPH

150 HDR
19 KPPH

150 HDR
144 PSI

TODAY
143 KP

YESTERDAY
458 KP

TODAY
520 KP
YESTERDAY
1860 KP

STEAM
540 °F
90 KPPH
388 PSI

FW FLOW
91 KPPH

Feedwater

BOILER OUT
-0.0 %
689 °F
-7.5 IN

START

STOP

106 KP

RESET

ID FAN OUT
7.9 IN

AH AIR OUT
426 °F
1.2 IN

FURNACE
0.20 IN

DRUM
-0.1 IN
409 PSI

D/P
6.3 IN

AH GAS OUT
458 °F
-4.0 IN

SCRUBBER
135 GPM
30 %

SOUTH 38 %
CENTER 56 %
NORTH 46 %

WINDBOX
0.1 IN

OFA
8.4 KCFM
26.0 IN

FUEL OIL
55 PSI
202 °F

FLOW
1 GPM

TANK LEVEL
82 %

TANK FLOW
1683 GPM

DISTRIB
14.4 IN

TOTAL AF
-12.5 KCFM

STOKER
0.7 IN

GRATE STM
181 PSI

FD FAN OUT
3.4 IN

67 %

BAGASSE

94 TPH

144 TPH

DEAERATOR

Boiler 3

Faceplates

Faceplates2

Grate

Trending

Alarming

Diagnostics

Genius Bus

Common

Comn Trends

Primary Server Is Active

Overview

BOILER NO. 4



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main

600# Steam

HEADER
392 PSI

WEST MILL 253 KPPH	EAST MILL 270 KPPH
150 HDR 19 KPPH	150 HDR 144 PSI
TODAY 143 KP	YESTERDAY 458 KP

TODAY
1449 KP

YESTERDAY
5383 KP

STEAM
577 °F

267 KPPH
388 PSI

FW FLOW
268 KPPH

Feedwater

BOILER OUT
4.2 %
711 °F
-4.0 IN

START

STOP

56 KP

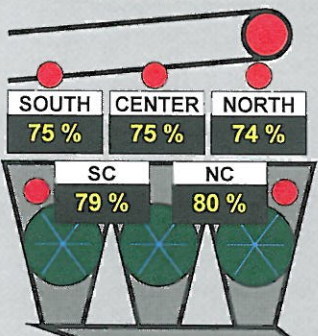
RESET

ID FAN
1159 RPM

ID FAN OUT
0.4 IN

AH AIR OUT
504 °F
3.9 IN

Feeder Pump
Stopped



FURNACE
-0.11 IN

DRUM
-0.5 IN
413 PSI

WINDBOX
-0.1 IN

D/P-N
7.0 IN

D/P-S
5.7 IN

AH GAS OUT
485 °F
-6.9 IN

SCRUB-N
325 GPM
38 %

SCRUB-S
40 %

DC OUT
-6.5 IN

FUEL OIL
54 PSI
203 °F

FLOW
1 GPM

OFA BACK
27.3 IN

OFA FRONT
22.0 IN

DISTRIB
21.1 IN

STOKER
0.3 IN

UG AIR
511 °F

UGA NORTH
34 KPPH

UGA SOUTH
37 KPPH

FD FAN OUT
4.6 IN

TANK LEVEL
82 %

TANK FLOW
1689 GPM

67 %

BAGASSE

96 TPH

137 TPH

DEAERATOR

- Boiler 4
- Faceplates1
- Faceplates2
- Trending
- Alarming
- Diagnostics
- Genius Bus
- Common
- Cmn Trends

Primary Server Is Active

Overview

BOILER NO. 5



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main

600# Steam

HEADER
390 PSI

WEST MILL
260 KPPH

EAST MILL
271 KPPH

150 HDR
19 KPPH

150 HDR
144 PSI

TODAY
143 KP

YESTERDAY
458 KP

TODAY
823 KP

STM TEMP
587 °F

YESTERDAY
3345 KP

151 KPPH
384 PSI

FW FLOW
145 KPPH

Feedwater

BOILER OUT
7.4 %
712 °F
-2.1 IN

START

STOP

0 KP

RESET

ID FAN
746 RPM

ID FAN OUT
4.4 IN

AH AIR OUT
405 °F

FURNACE
-1.12 IN

DRUM
0.6 IN
399 PSI

D/P-N
5.9 IN

D/P-S
5.7 IN

AH GAS OUT
491 °F
-6.1 IN

SCRUB-N
316 GPM
2 %

SCRUB-S
50 %

SCRUB H2O PSI
48 PSI

TANK LEVEL
82 %

TANK FLOW
1689 GPM

70 %

DC OUT
-11.1 IN

WINDBOX
-0.1 IN

FUEL OIL
54 PSI
203 °F

FLOW IN
1 GPM

TODAY
205 GAL

YESTERDAY
2126 GAL

OFA
22.4 IN

DISTRIB
21.2 IN

FD FAN OUT
5.8 IN

STOKER
-0.1 IN

UG AIR - N
5 KSCFM

UG AIR
463 °F

UG AIR - S
12 KSCFM

BAGASSE

110 TPH

128 TPH

DEAERATOR

Boiler 5

Faceplates1

Faceplates2

Trending

Alarming

Diagnostics

Genius Bus

Common

Cmn Trends

Primary Server Is Active

Overview

BOILER NO. 8



Primary PLC

- Primary Ready
- Primary Active
- Secondary Ready
- PLC Logic Equal

Main

600# Steam

HEADER
391 PSI

WEST MILL 245 KPPH	EAST MILL 260 KPPH
150 HDR 19 KPPH	150 HDR 144 PSI
TODAY 143 KP	YESTERDAY 458 KP

TODAY
1435 KP

YESTERDAY
5209 KP

STM TEMP
583 °F

260 KPPH

386 PSI

FW FLOW
257 KPPH

Feedwater

BOILER OUT
5.3 %
675 °F
-2.3 IN

START

STOP

0 KP

RESET

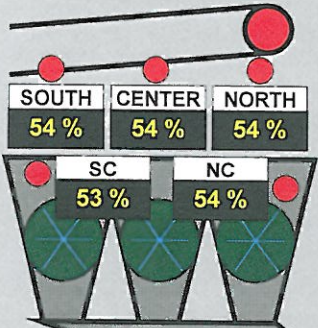
ID FAN
839 RPM

ID FAN OUT
8.9 IN

ECON OUT
0.5 IN

AH AIR OUT
371 °F
1.6 IN

Feeder Pump
Stopped



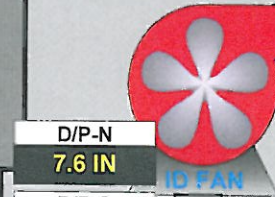
FURNACE
-0.19 IN
803 °F

DRUM
0.4 IN
411 PSI

WINDBOX
-4.5 IN

DC OUT
-10.1 IN

AH GAS OUT
299 °F
-10.8 IN



SCRUB-N
42644 GAL THIS
74368 GAL 1ST
72326 GAL 2ND
72016 GAL 3RD

SCRUB-N
151 GPM
60 %

SCRUB-S
150 GPM
74 %

SCRUB-S
42283 GAL THIS
68990 GAL 1ST
71858 GAL 2ND
71459 GAL 3RD

SCRUB H2O PSI
49 PSI

TANK LEVEL
82 %

TANK FLOW
1692 GPM

FUEL OIL
52 PSI
203 °F

FLOW IN
0.72 GPM

FLOW OUT
-1.94 GPM

TODAY
278 GAL

YESTERDAY
1104 GAL

OFA
24.1 IN

DISTRIB
19.5 IN

TOTAL AF
1.2 IN

STOKER
-1.1 IN

UG AIR
2.1 IN

UG AIR
374 °F

FD FAN OUT
1.2 IN

70 %

BAGASSE

107 TPH

135 TPH

DEAERATOR

- Boiler 8
- Faceplates1
- Faceplates2
- Trending
- Alarming
- Diagnostics
- Genius Bus
- Common
- Cmn Trends