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BUREAU OF AIR REGULATION

June 8, 2005

Florida Department of Environmental Protection
Department of Air Resources Management
Fort Myers, Florida 33902-2549

Attention: Mr. Ron Blackburn, Air Section Administrator

RE: UNITED STATES SUGAR CORPORATION (U.S. SUGAR) – CLEWISTON MILL
BOILER NO. 8 – NOTIFICATION OF COMPLIANCE STATUS
40 CFR PART 63, SUBPART DDDDD
PERMIT NO. 0510003-024-AC/PSD-FL-333A
ADDITIONAL INFORMATION SUBMITTAL

Dear Mr. Blackburn:

On May 25, 2005, Golder Associates Inc., on behalf of United States Sugar Corporation (U.S. Sugar), provided the initial notification of compliance status for Boiler No. 8, as required by Title 40 of the Code of Federal Regulations (40 CFR), sections 63.7545(e) and 63.9(h)(2)(ii). These provisions require that the owner or operator of a new boiler regulated by 40 CFR 63, Subpart DDDDD, submit a Notification of Initial Compliance Status as specified in 63.7545(e). In addition, for an affected source that is required to conduct an initial compliance demonstration as specified in section 63.7530(a), the results must be included in the notification.

The summary of complete test results (Table 1) and the responsible official certification statement were omitted from the May 25th notification. Therefore, these are attached.

The summary of test results covers the compliance testing conducted on March 24-25, 2005, as well as the Subpart DDDDD (MACT) compliance testing conducted on March 26, 2005. The Subpart DDDDD test report for the March 26 testing is attached (Attachment C). A discussion of both the compliance test results and the Subpart DDDDD test results follows below.

Boiler No. 8 Operation

During the compliance testing of March 24-25, the boiler averaged approximately 501,000 lb/hr steam, which is within 90 percent of the maximum 1-hour steam production limit of 550,000 lb/hr, and was 100 percent of the maximum 24-hour steam production limit of 500,000 lb/hr. The heat input rate, based on steam production, steam conditions, and using a boiler thermal efficiency of 62 percent, averaged approximately 942 MMBtu/hr, compared to a 1-hour permit limit of 1,030 MMBtu/hr and 24-hour permit limit of 936 MMBtu/hr. Boiler O_2 levels were approximately 6.7 percent.

During the MACT compliance testing of March 26th, the boiler averaged approximately 468,000 lb/hr steam, which is within 94 percent of the maximum 24-hour steam production limit of 500,000 lb/hr. The heat input rate based on the F-Factor (as required by the MACT regulations), averaged

approximately 906 MMBtu/hr, compared to a 24-hour permit limit of 936 MMBtu/hr. Boiler O_2 levels were approximately 6.1 percent.

Fuel Analysis and Mercury Test Results

Bagasse fuel analysis results from the test period are presented in Tables 2 and 3. Grab samples, three per test run, were obtained off of the bagasse conveyor belt feeding Boiler No. 8. The three individual grab samples from each run were combined into one composite sample according to the procedures in the Boiler No. 8 test protocol. The results of the proximate and ultimate analysis, heating value analysis, and chlorine content of the fuel are presented in Table 2. Also shown is the calculation of the F-Factor for each sample.

The results of the metals analysis of the bagasse fuel are presented in Table 3. The lab report is attached (Attachment A). Analysis results were in terms of parts per million (ppm) in the fuel, which were converted to lb/MMBtu equivalent using the heating value analysis.

Boiler No. 8 is complying with the Subpart DDDDD MACT limit for mercury (Hg) through fuel analysis. As shown in Table 3, all Hg contents were below the minimum detection limit of the method of 0.01 ppm (dry basis), equivalent to about 1.3E-06 lb/MMBtu, which is well below the MACT limit of 3E-06 lb/MMBtu.

Particulate Matter Test Results

Particulate matter (PM) emissions from Boiler No. 8 averaged 0.0039 lb/MMBtu during the compliance test runs, compared to a permit limit of 0.025 lb/MMBtu. These results are based on the thermal efficiency method of determining heat input to the boiler.

PM emissions from Boiler No. 8 averaged 0.0060 lb/MMBtu during the MACT test runs, compared to a MACT limit of 0.025 lb/MMBtu. These results are based on the F-Factor method of determining heat input to the boiler. It is noted that these runs were also conducted with a reduced electrostatic precipitator (ESP) power input in order to determine operating limits for the ESP as required by the MACT regulations.

Nitrogen Oxides Test Results

Nitrogen oxides (NO_x) emissions testing was conducted for the purpose of demonstrating the operation of the selective non-catalytic reduction (SNCR) system for NO_x control. NO_x emissions during the compliance testing (March 24-25) averaged 0.131 lb/MMBtu, compared to the demonstration value in the permit of 0.14 lb/MMBtu. Data from the Boiler No. 8 data acquisition and handling system (DAHS) was also obtained for all six test runs and are shown in Table 1.

Carbon Monoxide Test Results

There is no permit limit based on stack testing for carbon monoxide (CO), since compliance is demonstrated with the continuous emissions monitoring system (CEMS) for CO. CO emissions averaged 0.354 lb/MMBtu based on stack testing during the compliance test runs, and 0.515 lb/MMBtu based on the DAHS during the MACT test runs. CO data from the DAHS was obtained for all six test runs as shown in Table 1.

Sulfur Dioxide Test Results

Sulfur dioxide (SO_2) emissions from Boiler No. 8 averaged 0.025 lb/MMBtu during the compliance test runs, compared to a permit limit of 0.06 lb/MMBtu. These results are based on the thermal efficiency method of determining heat input to the boiler.

Volatile Organic Compound Test Results

Emissions of volatile organic compounds (VOC) from Boiler No. 8 averaged 0.012 lb/MMBtu (expressed as propane) during the compliance test runs, compared to a permit limit of 0.05 lb/MMBtu. These results are based on the thermal efficiency method of determining heat input to the boiler.

Hydrogen Chloride Test Results

Emissions of hydrogen chloride (HCl) from Boiler No. 8 averaged 0.0059 lb/MMBtu during the compliance test runs, compared to a MACT limit of 0.02 lb/MMBtu. These results are based on the F-Factor method of determining heat input to the boiler. These HCl emissions are the "controlled" HCl emissions at the stack, and are shown to be about 3 times lower than the MACT limit.

HCl emissions were also measured at the inlet to the wet scrubbers serving Boiler No. 8 in order to determine if it is necessary to employ a control device to meet the MACT limit for HCl. The uncontrolled HCl emissions were found to average 0.0043 lb/MMBtu, which is about 20 percent of the MACT limit of 0.02 lb/MMBtu. These results indicate that Boiler No. 8 can achieve the MACT standard for HCl without a control device. This is an expected result due to the low levels of chlorine in the bagasse fuel (although above the MACT limit of 0.02 lb/MMBtu), the alkaline nature of fly ash from bagasse combustion, and the resulting inherent acid gas removal associated with bagasse-fired boilers, as demonstrated through SO_2 testing on Boiler No. 7 at Clewiston, which has an ESP and no acid gas control device.

Ammonia Slip Test Results

Ammonia slip emissions from Boiler No. 8 are limited by permit condition to 20 ppmvd at 7-percent O_2. During the compliance testing, the ammonia slip emissions averaged 26.2 ppmvd at 7-percent O_2, which was slightly above the permit limit. However, it is noted that the SNCR system was not fully tuned at the time of testing, due to the short operational period of the boiler prior to testing. The manufacturer of the SNCR system expects compliance with the ammonia slip once the SNCR system is fully tuned.

Control Device Operating Limits

The MACT regulations require that operating limits for the control devices be set during the initial performance testing. The operating limits are set based on 90 percent of the minimum test run which demonstrated compliance. The MACT regulates PM and HCl emissions.

For PM, the control device is the ESP. Compliance with the PM limit of 0.025 lb/MMBtu was demonstrated on all six test runs. During the compliance test runs, the ESP was operating normally with all five ESP fields in operation. Total ESP power input averaged 110 kilowatts (kW). During the MACT test runs, the ESP power was reduced by taking two fields out of service. The total ESP power input averaged 59.5 kW, with the minimum test run averaging 53.2 kW. This results in an operating limit of 48 kW. This establishes the minimum ESP power input for subsequent operation.

For HCl, the control device is the two wet scrubbers, and the operating parameters are water flow rate, pressure drop and scrubber effluent pH. However, the testing demonstrates that the wet scrubber is not necessary for compliance with the MACT standard for HCl. Therefore, no operating parameters are established for the wet scrubbers.

Relative Accuracy Testing

A relative accuracy test audit (RATA) of the Boiler No. 8 CEMS for CO, NO_x, and O_2 were conducted during the compliance testing. The RATA results were submitted to the Florida Department of Environmental Protection under separate cover. The tests demonstrated that the CEMS meet the RATA requirements.

A 7-day drift test of the CEMS is also a part of the RATA. The results of the 7-day drift tests for the CEMS are attached (Attachment B). The monitors passed the 7-day drift test.

Please call me at (352) 336-5600 or e-mail me at dbuff@golder.com if you have any questions concerning this information.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

David A. Buff, P.E., Q.E.P.
Principal Engineer
Florida P.E. #19011
SEAL

DB/dmw

Enclosures

cc: Don Griffin
Peter Briggs
Jeff Koerner, FDEP Tallahassee
Doug Neeley, EPA Region 4

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APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   William A. Raiola, Senior Vice President, Sugar Processing Operations

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

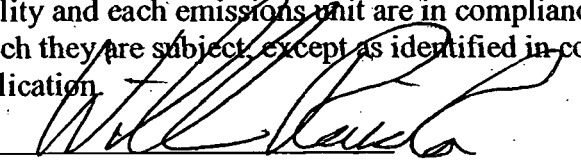
3. Application Responsible Official Mailing Address...
   Organization/Firm: **United States Sugar Corporation**
   Street Address: **111 Ponce de Leon Avenue**
   City: **Clewiston** State: **Florida** Zip Code: **33440**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(863) 983-8121** ext. Fax: **(863) 902-2729**

5. Application Responsible Official Email Address: **wraiola@ussugar.com**

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application 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 application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. 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 compliance plan(s) submitted with this application.

   Signature

   May 24, 2005
   Date

Table 1. Summary of Initial Performance Test Results for Boiler No. 8, U.S. Sugar Clewiston

Parameter	Source of Data	C-1 3/24/2005 11:32-12:47	C-2 3/24/2005 17:37-18:50	C-3 3/25/2005 14:41-15:58	**Average**	E-1 3/26/2005 10:44-12:06	E-2 3/26/2005 14:38-16:19	E-3 3/26/2005 17:19-19:05	**Average**	**Permit or Subpart DDDDD Limit**
Steam Production (lb/hr)	DAHS	519,290	485,970	497,300	**500,853**	470,930	467,580	466,000	**468,170**	**550,000**
Heat Input (MMBtu/hr) (62% eff.)[b]	DAHS	979.9	914.8	932.4	**942.4**	884.5	880.9	867.6	**877.7**	**1,030**
Stack Flow (acfm)	DAHS	421,100	409,000	416,500	**415,533**	386,100	383,300	381,618	**383,673**	**--**
Stack Flow (dscfm)	DAHS	246,252	239,944	230,327	**238,841**	216,300	213,889	219,498	**216,562**	**--**
Stack Temp. (deg. F)	DAHS	265	269	270	**268**	268	265	263	**265**	**--**
Oxygen (%)	DAHS	6.50	6.84	6.65	**6.66**	6.28	5.75	6.33	**6.12**	**--**
F-Factor (dscf/MMBtu)	Fuel Analysis	9,927	9,967	9,821	**9,905**	9,435	9,631	9,803	**9,623**	**--**
Stack Flow (dscfm)	Stack Test	236,279	218,899	218,814	**224,664**	205,956	204,635	208,161	**206,251**	**--**
Oxygen (%)	Stack Test	6.52	6.96	6.53	**6.67**	6.20	6.00	6.34	**6.18**	**--**
Stream Production (lb/hr)	Stack Test	518,571	487,595	496,578	**500,915**	--	--	--	**--**	**550,000**
Heat Input (MMBtu/hr) (62% eff.)[b]	Stack Test	977.3	916.6	929.6	**941**	--	--	--	**--**	**1,030**
Heat Input from F-Factor (MMBtu/hr)	Stack Test	982.6	878.9	919.1	**927**	921.2	908.9	887.6	**906**	**1,030**
Particulate Matter (lb/MMBtu)[a]	Stack Test	0.0043	0.0032	0.0040	**0.0039**	0.0034	0.0068	0.0078	**0.0060**	**0.025**
Nitrogen Oxides (lb/MMBtu)[b]	Stack Test	0.128	0.133	0.132	**0.131**	--	--	--	**--**	**0.14**
Carbon Monoxide (lb/MMBtu)[b]	Stack Test	0.349	0.313	0.399	**0.354**	--	--	--	**--**	**0.38[c]**
Sulfur Dioxide (lb/MMBtu)[b]	Stack Test	0.023	0.030	0.021	**0.025**	--	--	--	**--**	**0.06**
Volatile Organic Compds ((lb/MMBtu)[b]	Stack Test	0.013	0.010	0.013	**0.012**	--	--	--	**--**	**0.05**
Hydrogen Chloride (inlet) (lb/MMBtu)[a]	Stack test	N/A	N/A	N/A	**N/A**	0.0091	0.0024	0.0013	**0.0043**	**N/A**
Hydrogen Chloride (outlet) (lb/MMBtu)[a]	Stack test	N/A	N/A	N/A	**N/A**	0.0099	0.0038	0.0041	**0.0059**	**0.02**
Mercury (lb/MMBtu)	Fuel Analysis	<1.4E-06	<1.3E-06	<1.3E-06	**<1.3E-06**	<1.2E-06	<1.3E-06	<1.3E-06	**<1.3E-06**	**3.0E-06**
Ammonia Slip (ppmvd @ 7% O_2)	Stack test	21.5	31.9	25.2	**26.2**	--	--	--	**--**	**20**
NOx CEMS										
NOx (ppmvd)	DAHS	68	65	72	**68**	70	67	66	**68**	**--**
NOx (ppmvd @ 7% O2)	DAHS	65	65	70	**67**	67	61	63	**64**	**--**
NOx (lb/hr)	DAHS	119.2	112.3	118.5	**116.7**	109.1	102.5	102.5	**104.7**	**131.0[d]**
NOx (lb/MMBtu)	DAHS	0.122	0.122	0.127	**0.124**	0.123	0.117	0.119	**0.120**	**0.14[d]**
CO CEMS										
CO (ppmvd)	DAHS	344	323	395	**354**	357	651	432	**480**	**--**
CO (ppmvd @ 7% O2)	DAHS	331	318	385	**345**	339	593	412	**448**	**400[d]**
CO (lb/hr)	DAHS	369	336	397	**367**	336	607	412	**452**	**--**
CO (lb/MMBtu)	DAHS	0.377	0.368	0.425	**0.390**	0.381	0.688	0.477	**0.515**	**0.38[c]**
										Operating Limits @ 90%[e]
Urea Injection Rate (gal/hr)	DAHS	53.7	48.4	41.7	**47.9**	45.6	22.3	33.4	**33.8**	**--**
Total ESP Power Input (kW)	DAHS	120.3	109.6	101.4	**110.4**	69.9	55.3	53.2	**59.5**	**48**
Scrubber 1 Water Flow (gal/hr)	DAHS	2,610	2,620	2,630	**2,620**	2,630	2,640	2,640	**2,637**	**2,349**
Scrubber 2 Water Flow (gal/hr)	DAHS	2,540	2,550	2,580	**2,557**	2,590	2,590	2,590	**2,590**	**2,286**
Scrubber 1 Pressure Drop (in. H2O)	DAHS	8.15	7.65	8.05	**7.95**	7.96	7.72	7.72	**7.80**	**6.9**
Scrubber 2 Pressure Drop (in. H2O)	DAHS	8.34	7.83	8.25	**8.14**	8.24	7.93	7.93	**8.03**	**7.0**
Scrubber 1 pH (SI units)	Circular Chart	7.7	7.7	7.6	**7.67**	7.6	7.7	7.7	**7.67**	**6.8**
Scrubber 2 pH (SI units)	Circular Chart	7.7	7.7	7.7	**7.70**	7.6	7.7	7.7	**7.67**	**6.8**

[a] Calculated using steam production and conditions and 62% thermal efficiency for March 24-25 tests; calculated using F-Factor from fuel analysis for March 26 tests.

[b] Calculated using steam parameters and 62% thermal efficiency.

[c] Based on a 12-month rolling average.

[d] Based on a 30-day rolling average.

[e] Based on 40 CFR 63, Subpart DDDDD: limit is 90% of minimum test run value. Since uncontrolled HCl emissions are less than the MACT standard, the wet scrubber parameter operating limits are not in effect.

Table 2. Proximate, Ultimate, and Heat Content Analyses Results for Bagasse from Boiler No. 8, U.S. Sugar

Parameter	Units	Analysis Results (dry basis)						Range		Avg	Parameter
		3/24/2005 R1	3/24/2005 R2	3/25/2005 R3	3/26/2005 ER1	3/26/2005 ER2	3/26/2005 ER3	Min	Max		
No. of Samples Composited		3	3	3	3	3	3	--	--	--	
Moisture	%, as received	54.29	56.02	59.11	57.27	58.61	58.46	54.29	59.11	57.29	Moisture
Ash	%	10.64	7.08	5.07	3.78	6.19	4.19	3.78	10.64	6.16	Ash
Ash	lb/MMBtu	14.42	9.11	6.39	4.62	7.87	5.26	4.62	14.42	7.95	Ash
Volatiles	%	77.65	81.26	83.28	84.71	82.08	82.91	77.65	84.71	81.98	Volatiles
Fixed C	%	11.71	11.66	11.65	11.51	11.73	12.90	11.51	12.90	11.86	Fixed C
HHV	Btu/lb	7,378	7,769	7,923	8,170	7,864	7,962	7,378	8,170	7,844	HHV
MMF	Btu/lb	8,335	8,412	8,381	8,517	8,426	8,339	8,335	8,517	8,402	MMF
MAF	Btu/lb	8,256	8,361	8,346	8,490	8,382	8,310	8,256	8,490	8,358	MAF
Air Dry Loss	%	53.74	55.35	58.24	56.50	57.82	57.27	53.74	58.24	56.49	Air Dry Loss
Carbon	%	45.78	48.29	48.91	50.05	48.15	49.61	45.78	50.05	48.47	Carbon
Hydrogen	%	5.58	5.79	5.80	5.20	5.55	5.62	5.20	5.80	5.59	Hydrogen
Nitrogen	%	0.52	0.47	0.49	0.55	0.42	0.49	0.42	0.55	0.49	Nitrogen
Sulfur	%	0.05	0.06	0.07	0.09	0.06	0.06	0.05	0.09	0.07	Sulfur
Oxygen	%	37.43	38.31	39.66	40.33	39.63	40.03	37.43	40.33	39.23	Oxygen
SO_2	lb/MMBtu	0.14	0.16	0.18	0.22	0.16	0.16	0.14	0.22	0.17	SO_2
Chlorine	%	0.038	0.043	0.059	0.048	0.063	0.050	0.038	0.063	0.050	Chlorine
F-Factor											
Fd	dscf/MMBtu	9,927	9,967	9,821	9,435	9,631	9,803	9,435	9,967	9,764	Fd

Note: % = percent.
Btu/lb = British thermal unit per pound.
C = carbon.
HHV = higher heating value.
lb/MMBtu = pounds per million British thermal unit.
MAF = moisture and ash free; dry basis heating value without ash included.
MMF = mineral and matter free; heating value without sulfur and ash included.
SO_2 = sulfur dioxide.

Table 3. Metals and Chlorine Analyses for Bagasse from US Sugar Boiler No. 8

Parameter	Units	Concentration (dry basis) 3/24/2005 R1	3/24/2005 R2	3/25/2005 R3	3/26/2005 ER1	3/26/2005 ER2	3/26/2005 ER3	Range [a] Min	Max	Avg[a]	Parameter
Chlorine	ppm	380	430	590	480	630	500	380	630	501.67	Chlorine
Arsenic	ppm	0.7	0.6	0.9	< 0.8	< 0.6	0.5	0.30	0.90	0.57	Arsenic
Beryllium	ppm	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.10	0.10	0.10	Beryllium
Cadmium	ppm	< 0.2	< 0.2	< 0.2	< 0.2	< 0.4	< 0.2	0.10	0.20	0.12	Cadmium
Chromium	ppm	1	0.4	0.7	0.8	0.5	0.4	0.40	1.00	0.63	Chromium
Lead	ppm	0.3	0.2	0.3	0.3	0.2	< 0.2	0.10	0.30	0.23	Lead
Manganese	ppm	10.7	10	7.4	10.5	8.5	7.4	7.40	10.70	9.08	Manganese
Nickel	ppm	0.3	0.2	0.3	0.4	0.2	0.2	0.20	0.40	0.27	Nickel
Selenium	ppm	0.9	0.9	1.2	0.9	1.0	0.9	0.90	1.20	0.97	Selenium
Mercury	ppm	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01	0.01	0.01	Mercury
Moisture	%	49.6	51.9	52.3	53.9	57.0	59	49.60	59.00	53.95	Moisture
No. of Samples Composited		3	3	3	3	3	3	--	--	--	

Parameter	Units	Concentration (dry basis) 3/24/2005 R1	3/24/2005 R2	3/25/2005 R3	3/26/2005 ER1	3/26/2005 ER2	3/26/2005 ER3	Range [a] Min	Max	Avg[a]	Standard Deviation [a]	90% Confidence Level [c]	Parameter
HHV	Btu/lb	7,378	7,769	7,923	8,170	7,864	7,962	7,378	8,170	7,844	--	--	HHV
Chlorine	lb/MMBtu	5.15E-02	5.53E-02	7.45E-02	5.88E-02	8.01E-02	6.28E-02	5.15E-02	7.45E-02	6.06E-02 (n = 6, t = 2.015)	1.12E-02	8.32E-02	Chlorine
Arsenic	lb/MMBtu	9.49E-05	7.72E-05	1.14E-04	< 9.79E-05	< 7.63E-05	6.28E-05	3.81E-05	1.14E-04	7.26E-05	--	--	Arsenic
Beryllium	lb/MMBtu	< 2.71E-05	< 2.57E-05	< 2.52E-05	< 2.45E-05	< 2.54E-05	< 2.51E-05	1.22E-05	1.36E-05	1.28E-05	--	--	Beryllium
Cadmium	lb/MMBtu	< 2.71E-05	< 2.57E-05	< 2.52E-05	< 2.45E-05	< 5.09E-05	< 2.51E-05	1.22E-05	2.54E-05	1.49E-05	--	--	Cadmium
Chromium	lb/MMBtu	1.36E-04	5.15E-05	8.84E-05	9.79E-05	6.36E-05	5.02E-05	5.02E-05	1.36E-04	8.12E-05	--	--	Chromium
Lead	lb/MMBtu	4.07E-05	2.57E-05	3.79E-05	3.67E-05	2.54E-05	< 2.51E-05	1.26E-05	4.07E-05	2.98E-05	--	--	Lead
Manganese	lb/MMBtu	1.45E-03	1.29E-03	9.34E-04	1.29E-03	1.08E-03	9.29E-04	9.29E-04	1.45E-03	1.16E-03	--	--	Manganese
Nickel	lb/MMBtu	4.07E-05	2.57E-05	3.79E-05	4.90E-05	2.54E-05	2.51E-05	2.51E-05	4.90E-05	3.40E-05	--	--	Nickel
Selenium	lb/MMBtu	1.22E-04	1.16E-04	1.51E-04	1.10E-04	1.27E-04	1.13E-04	1.10E-04	1.51E-04	1.23E-04	--	--	Selenium
8-Metals Total		1.91E-03	1.61E-03	1.39E-03	1.65E-03	1.40E-03	1.22E-03	1.22E-03	1.91E-03	1.53E-03 (n = 6, t = 2.015)	2.45E-04	2.02E-03	8-Metals
Mercury [b]	lb/MMBtu	< 1.36E-06	< 1.29E-06	< 1.26E-06	< 1.22E-06	< 1.27E-06	< 1.26E-06	6.12E-07	6.78E-07	6.12E-07 (n = 6)	NA	NA	Mercury

[a] For concentrations that are reported as below detection limit the minimum, maximum, average, and standard deviation were calculated by taking one-half of detection limit. Duplicate samples were not included in the calculations.

[b] Minimum, maximum, average, and standard deviation for mercury are based only on the individual samples with a lower detection limit.

[c] 90% confidence level calculated based on the following equation (40 CFR 63.7530(d)(2)):

P_{90} = mean + (SD * t); where:

P_{90} = 90% confidence level pollutant concentration (lb/MMBtu)

mean = average of fuel samples analyzed (lb/MMBtu)

SD = standard deviation of pollutant concentrations (lb/MMBtu)

t = t distribution critical value for 90% confidence probability (0.1) for n-1 degrees of freedom

n = number of samples

ATTACHMENT A

METALS ANALYSIS OF BAGASSE FUEL FOR BOILER NO. 8

May 12, 2005

Mr Dave Buff
Golder Associates, Inc.
6241 NW 23 St., Suite 500
Gainesville, FL 32653-1500

Dear Mr. Buff:

Enclosed are the analytical results for the samples received March 2005.

All data were determined in accordance with published procedures (*EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, December 1996, 3rd Edition incl. Updates I–III; and *Standard Methods for the Examination of Water and Wastewater*, 18th Edition, 1992). Our laboratory is certified by Florida Department of Health (FDH No. E82001).

If you have any questions concerning this report, please contact me.

Sincerely,

Paul Berman
Project Manager

Enclosures

REPORT OF ANALYSES (SN-00003655)

Golder Associates Inc.
6241 NW 23rd St
Suite 500
Gainesville, FL 32653-1500
Attn: Mr. Dave Buff

DATE: 05/12/05
FDH # E82001

Samples received March 2005 (Page 1 of 2)

LAB No.	SAMPLE DATE	SAMPLE TIME	SAMPLER	DELIVERY TO LAB DATE	TIME	MATRIX
264713	03/28/05	----	CLIENT	03/29/05	0830	SO
264714	03/28/05	----	CLIENT	03/29/05	0830	SO
264715	03/28/05	----	CLIENT	03/29/05	0830	SO
264716	03/28/05	----	CLIENT	03/29/05	0830	SO
264717	03/28/05	----	CLIENT	03/29/05	0830	SO
264718	03/28/05	----	CLIENT	03/29/05	0830	SO

CLIENT STATION ID	LAB NUMBER	%SOLIDS %	AS/S/ICP mg/kg	BE/S/ICP mg/kg	CD/S/ICP mg/kg	CR/S/ICP mg/kg	PB/S/ICP mg/kg
USS-B8R1-324	264713	51.9	0.7	0.0 I	0.0 I	1.0	0.3
USS-B8R2-324	264714	49.4	0.6	0.0 I	0.0 I	0.4	0.2
USS-B8R3-325	264715	41.9	0.9	0.0 I	0.0 I	0.7	0.3
USS-B8ER1-326	264716	45.8	0.8	0.0 I	0.0 I	0.8	0.3
USS-B8ER2-326	264717	46.9	0.6	0.0 I	0.4 U	0.5	0.2
USS-B8ER3-326	264718	45.8	0.5	0.0 I	0.0 I	0.4	**0.24**

U = Result below detection limit
I = Result between detection limit and practical quantitation limit

PROJECT MANAGER _____

REPORT OF ANALYSES (SN-00003655)

Golder Associates Inc.
6241 NW 23rd St
Suite 500
Gainesville, FL 32653-1500
Attn: Mr. Dave Buff

DATE: 05/12/05
FDH # E82001
DEP CQAP # 870017G

Samples received March 2005 (Page 2 of 2)

LAB No.	SAMPLE DATE	SAMPLE TIME	SAMPLER	DELIVERY TO LAB DATE	TIME	MATRIX
264713	03/28/05	----	CLIENT	03/29/05	0830	SO
264714	03/28/05	----	CLIENT	03/29/05	0830	SO
264715	03/28/05	----	CLIENT	03/29/05	0830	SO
264716	03/28/05	----	CLIENT	03/29/05	0830	SO
264717	03/28/05	----	CLIENT	03/29/05	0830	SO
264718	03/28/05	----	CLIENT	03/29/05	0830	SO

CLIENT STATION ID	LAB NUMBER	MN/S/ICP mg/kg	HG/S/CVAA mg/kg	NI/S/ICP mg/kg	SE/S/ICP mg/kg
USS-B8R1-324	264713	10.7	0.010 U	0.3	0.9
USS-B8R2-324	264714	10.0	0.010 U	0.2	0.9
USS-B8R3-325	264715	7.4	0.010 U	0.3	1.2
USS-B8ER1-326	264716	10.5	0.010 U	0.4	0.9
USS-B8ER2-326	264717	8.5	0.010 U	0.2	1.0
USS-B8ER3-326	264718	7.4	0.010 U	0.2	0.9

U = Result below detection limit
I = Result between detection limit and practical quantitation limit

PROJECT MANAGER _____

QC REPORT FOR Golder Associates Inc. 05/12/05 PAGE 1

TOTAL SOLIDS % SO Method: EPA 160.3 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
264714	USS-B8R2-324	49.4	47.2	2.2	3.22	17.11

Method Blanks

Blank Concentration	Analytical Batch #	Sample Numbers in Batch
< 0.1	66083	264713-264718,

ARSENIC IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	112	---	-4 TO 211	----	----
264716	USS-B8ER1-326	126	---	-4 TO 211	----	----
264716	USS-B8ER1-326	123	---	-4 TO 211	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	173	152	88	84 TO 115
ICV	2000	2060	103	85 TO 113
SLCS110470	178	164	94	85 TO 113
ICV	2000	2040	102	85 TO 113
SLCS110495	178	176	99	85 TO 113
ICV	2000	2040	102	85 TO 113

BERYLLIUM IN SED. mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	98	---	53 TO 134	----	----
264716	USS-B8ER1-326	104	---	53 TO 134	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	101	95.4	94	81 TO 121
ICV	2000	2110	106	80 TO 121
SLCS110470	101	94.5	94	81 TO 121
ICV	2000	1990	100	81 TO 121
SLCS110495	101	103	102	81 TO 120
ICV	2000	2040	102	81 TO 120

CADMIUM IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	100	---	-15 TO 181	----	----
264716	USS-B8ER1-326	105	---	-15 TO 181	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	142	121	85	77 TO 118
ICV	2000	2060	103	76 TO 119
SLCS110470	142	118	83	76 TO 119
ICV	2000	1960	98	77 TO 116
SLCS110495	142	138	97	78 TO 114
ICV	2000	2060	103	78 TO 114

CHROMIUM IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	95	---	6 TO 166	----	----
264716	USS-B8ER1-326	97	---	6 TO 166	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	72.8	65.5	90	82 TO 114
ICV	2000	2060	103	82 TO 113
SLCS110470	72.8	64.0	88	82 TO 113
ICV	2000	1930	97	81 TO 113
SLCS110495	72.8	70.4	97	82 TO 112
ICV	2000	2040	102	82 TO 112

LEAD IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	80	---	35 TO 150	----	----
264716	USS-B8ER1-326	101	---	35 TO 150	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	149	133	89	87 TO 110
ICV	2000	2050	102	86 TO 111
SLCS110470	149	136	91	86 TO 111
ICV	2000	1960	98	86 TO 111
SLCS110495	149	154	103	86 TO 111
ICV	2000	2040	102	85 TO 111

MANGANESE IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	104	---	-76 TO 226	----	----
264716	USS-B8ER1-326	92	---	-76 TO 226	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	394	385	98	86 TO 114
ICV	2000	2080	104	86 TO 114
SLCS110470	394	388	98	86 TO 114
ICV	2000	1960	98	86 TO 114
SLCS110495	394	486	123	86 TO 114
ICV	2000	2040	102	83 TO 118

MERCURY IN SEDIMENT mg/kg SO Method: EPA 7471 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
264713	USS-B8R1-324	<0.010	<0.010	0	0.00	68.73

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264714	USS-B8R2-324	84	84	45 TO 144	0.00	22.86

References

Reference ID	Target	Found	% Recovery	Control Limits
MS2710	32.6	30.8	94	49 TO 150

Method Blanks

Blank Concentration	Analytical Batch #	Sample Numbers in Batch
<0.010	66081	264713-264718,

NICKEL IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	90	---	24 TO 146	----	----
264716	USS-B8ER1-326	90	---	24 TO 146	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	158	139	88	79 TO 118
ICV	2000	2060	103	78 TO 118
SLCS110470	158	148	94	79 TO 118
SLCS110495	158	154	97	79 TO 117

References

Reference ID	Target	Found	% Recovery	Control Limits
ICV	2000	2050	103	79 TO 117

SELENIUM IN SEDIMENT mg/kg SO Method: EPA 6010 Alt. Method: None

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
264716	USS-B8ER1-326	131	---	-34 TO 216	----	----
264716	USS-B8ER1-326	129	---	-34 TO 216	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
SLCS110441	70.8	59.9	85	72 TO 131
ICV	2000	2020	101	71 TO 131
SLCS110470	70.8	63.8	90	71 TO 131
ICV	2000	2000	100	70 TO 130
SLCS110495	70.8	73.3	104	71 TO 130
ICV	2000	2060	103	71 TO 129

DATE, TIME, ANALYST REPORT

ANALYSIS	METHOD	PREP DATE	PREP BY	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS BY	MATRIX
%SOLIDS	EPA 160.3	/ /		03/20/05	1315	SEA	SO
%SOLIDS	EPA 160.3	/ /		03/23/05	1721	RH	SO
%SOLIDS	EPA 160.3	/ /		03/29/05	1600	RH	SO
AS/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
AS/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
AS/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
BE/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
BE/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
BE/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
CD/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
CD/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
CD/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
CR/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
CR/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
CR/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
HG/S/CVAA	EPA 7471	/ /		03/31/05	1730	ECS	SO
MN/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
MN/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
MN/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
NI/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
NI/S/ICP	EPA 6010	03/24/05	ECS	04/06/05	1032	KTB	SO
PB/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
PB/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
PB/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO
SE/S/ICP	EPA 6010	03/17/05	ECS	03/18/05	1212	KTB	SO
SE/S/ICP	EPA 6010	03/24/05	ECS	03/29/05	1950	KTB	SO
SE/S/ICP	EPA 6010	04/05/05	ECS	04/06/05	1032	KTB	SO

ATTACHMENT B

7-DAY DRIFT TEST FOR BOILER NO. 8

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 CO ppm/H

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 06:25 AM	10000	0.00	-4.52	-4.52	500.00	8318.33	8240.08	-78.25	500.00	On-Line
03/27/05 06:25 AM	10000	0.00	-5.49	-5.49	500.00	8318.33	8227.39	-90.94	500.00	On-Line
03/28/05 06:25 AM	10000	0.00	-6.11	-6.11	500.00	8318.33	8222.33	-96.00	500.00	On-Line
03/29/05 06:25 AM	10000	0.00	-6.20	-6.20	500.00	8318.33	8213.82	-104.51	500.00	Off-Line
03/30/05 06:25 AM	10000	0.00	-7.28	-7.28	500.00	8318.33	8204.11	-114.22	500.00	On-Line
03/31/05 06:25 AM	10000	0.00	-7.09	-7.09	500.00	8318.33	8214.69	-103.64	500.00	Off-Line
04/01/05 06:25 AM	10000	0.00	-7.31	-7.31	500.00	8318.33	8213.44	-104.89	500.00	Off-Line
04/02/05 06:25 AM	10000	0.00	-7.04	-7.04	500.00	8318.33	8214.18	-104.15	500.00	Off-Line
04/03/05 06:25 AM	10000	0.00	-6.53	-6.53	500.00	8318.33	8221.54	-96.79	500.00	Off-Line
04/04/05 06:25 AM	10000	0.00	-6.96	-6.96	500.00	8318.33	8224.06	-94.27	500.00	Off-Line
04/05/05 06:25 AM	10000	0.00	-6.85	-6.85	500.00	8318.33	8213.66	-104.67	500.00	On-Line
04/06/05 06:25 AM	10000	0.00	-7.04	-7.04	500.00	8318.33	8219.04	-99.29	500.00	On-Line
04/07/05 06:25 AM	10000	0.00	-7.07	-7.07	500.00	8318.33	8219.30	-99.03	500.00	On-Line

The 7-Day Drift Test has been passed.

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 CO ppm/L

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 06:25 AM	1000	0.000	1.444	1.444	50.000	815.700	822.005	6.305	50.000	On-Line
03/27/05 06:25 AM	1000	0.000	0.165	0.165	50.000	815.700	819.653	3.953	50.000	On-Line
03/28/05 06:25 AM	1000	0.000	0.729	0.729	50.000	815.700	818.711	3.011	50.000	On-Line
03/29/05 06:25 AM	1000	0.000	0.405	0.405	50.000	815.700	815.595	-0.105	50.000	Off-Line
03/30/05 06:25 AM	1000	0.000	0.538	0.538	50.000	815.700	812.966	-2.734	50.000	On-Line
03/31/05 06:25 AM	1000	0.000	0.401	0.401	50.000	815.700	814.161	-1.539	50.000	Off-Line
04/01/05 06:25 AM	1000	0.000	0.823	0.823	50.000	815.700	806.800	-8.900	50.000	Off-Line
04/02/05 06:25 AM	1000	0.000	0.602	0.602	50.000	815.700	803.658	-12.042	50.000	Off-Line
04/03/05 06:25 AM	1000	0.000	0.981	0.981	50.000	815.700	778.056	-37.644	50.000	Off-Line
04/04/05 06:25 AM	1000	0.000	0.802	0.802	50.000	815.700	775.787	-39.913	50.000	Off-Line
04/05/05 06:25 AM	1000	0.000	0.792	0.792	50.000	815.700	813.572	-2.128	50.000	On-Line
04/06/05 06:25 AM	1000	0.000	1.208	1.208	50.000	815.700	813.947	-1.753	50.000	On-Line
04/07/05 06:25 AM	1000	0.000	0.333	0.333	50.000	815.700	813.996	-1.704	50.000	On-Line

The 7-Day Drift Test has been passed.

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 NOx ppm

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 06:25 AM	250	0.0	0.2	0.2	6.3	181.4	178.9	-2.5	6.3	On-Line
03/27/05 06:25 AM	250	0.0	0.1	0.1	6.3	181.4	176.0	-5.4	6.3	On-Line
03/28/05 06:25 AM	250	0.0	0.0	0.0	6.3	181.4	178.9	-2.5	6.3	On-Line
03/29/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	178.3	-3.1	6.3	Off-Line
03/30/05 06:25 AM	250	0.0	0.1	0.1	6.3	181.4	178.7	-2.7	6.3	On-Line
03/31/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	179.2	-2.2	6.3	Off-Line
04/01/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	179.1	-2.3	6.3	Off-Line
04/02/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	179.5	-1.9	6.3	Off-Line
04/03/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	174.2	**-7.2**	6.3	Off-Line
04/04/05 06:25 AM	250	0.0	-0.1	-0.1	6.3	181.4	174.3	**-7.1**	6.3	Off-Line
04/05/05 06:25 AM	250	0.0	0.1	0.1	6.3	181.4	182.7	1.3	6.3	On-Line
04/06/05 06:25 AM	250	0.0	0.8	0.8	6.3	181.4	182.1	0.7	6.3	On-Line
04/07/05 06:25 AM	250	0.0	0.8	0.8	6.3	181.4	180.7	-0.7	6.3	On-Line

The 7-Day Drift Test has been passed.

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 Wet O2%

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 06:25 AM	25	2.518	2.474	-0.044	0.750	18.250	18.251	0.001	0.750	On-Line
03/27/05 06:25 AM	25	2.518	2.463	-0.055	0.750	18.250	18.183	-0.067	0.750	On-Line
03/28/05 06:25 AM	25	2.518	2.472	-0.046	0.750	18.250	18.250	0.000	0.750	On-Line
03/29/05 06:25 AM	25	2.518	2.463	-0.055	0.750	18.250	18.192	-0.058	0.750	Off-Line
03/30/05 06:25 AM	25	2.518	2.464	-0.054	0.750	18.250	18.230	-0.020	0.750	On-Line
03/31/05 06:25 AM	25	2.518	2.474	-0.044	0.750	18.250	18.229	-0.021	0.750	Off-Line
04/01/05 06:25 AM	25	2.518	2.471	-0.047	0.750	18.250	18.196	-0.054	0.750	Off-Line
04/02/05 06:25 AM	25	2.518	2.477	-0.041	0.750	18.250	18.217	-0.033	0.750	Off-Line
04/03/05 06:25 AM	25	2.518	2.472	-0.046	0.750	18.250	18.183	-0.067	0.750	Off-Line
04/04/05 06:25 AM	25	2.518	2.470	-0.048	0.750	18.250	18.183	-0.067	0.750	Off-Line
04/05/05 06:25 AM	25	2.518	2.467	-0.051	0.750	18.250	18.281	0.031	0.750	On-Line
04/06/05 06:25 AM	25	2.518	2.460	-0.058	0.750	18.250	18.201	-0.049	0.750	On-Line
04/07/05 06:25 AM	25	2.518	2.458	-0.060	0.750	18.250	18.230	-0.020	0.750	On-Line

The 7-Day Drift Test has been passed.

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 O2%

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 06:25 AM	25	2.518	2.590	0.072	0.500	18.250	18.490	0.240	0.500	On-Line
03/27/05 06:25 AM	25	2.518	2.601	0.083	0.500	18.250	18.469	0.219	0.500	On-Line
03/28/05 06:25 AM	25	2.518	2.603	0.085	0.500	18.250	18.503	0.253	0.500	On-Line
03/29/05 06:25 AM	25	2.518	2.653	0.135	0.500	18.250	18.545	0.295	0.500	Off-Line
03/30/05 06:25 AM	25	2.518	2.673	0.155	0.500	18.250	18.556	0.306	0.500	On-Line
03/31/05 06:25 AM	25	2.518	2.679	0.161	0.500	18.250	18.578	0.328	0.500	Off-Line
04/01/05 06:25 AM	25	2.518	2.679	0.161	0.500	18.250	18.576	0.326	0.500	Off-Line
04/02/05 06:25 AM	25	2.518	2.639	0.121	0.500	18.250	18.541	0.291	0.500	Off-Line
04/03/05 06:25 AM	25	2.518	2.703	0.185	0.500	18.250	18.592	0.342	0.500	Off-Line
04/04/05 06:25 AM	25	2.518	2.707	0.189	0.500	18.250	18.589	0.339	0.500	Off-Line
04/05/05 06:25 AM	25	2.518	2.688	0.170	0.500	18.250	18.559	0.309	0.500	On-Line
04/06/05 06:25 AM	25	2.518	2.688	0.170	0.500	18.250	18.573	0.323	0.500	On-Line
04/07/05 06:25 AM	25	2.518	2.672	0.154	0.500	18.250	18.555	0.305	0.500	On-Line

The 7-Day Drift Test has been passed.

US SUGAR CORP - CLEWISTON

7-Day Drift Test

Boiler 8 Stack Differential Pressure Inches H2O

Time	Instrument Span	Zero Reference	Zero Measured	Zero Drift	Zero Drift Limit	Span Reference	Span Measured	Span Drift	Span Drift Limit	Status
03/26/05 08:02 AM	2	0.000	0.076	**0.076**	0.060	1.750	1.769	0.019	0.060	On-Line
03/26/05 07:43 PM	2	0.000	0.037	0.037	0.060	1.750	1.772	0.022	0.060	On-Line
03/27/05 08:25 AM	2	0.000	0.038	0.038	0.060	1.750	1.764	0.014	0.060	On-Line
03/28/05 08:25 AM	2	0.000	0.038	0.038	0.060	1.750	1.765	0.015	0.060	On-Line
03/29/05 08:25 AM	2	0.000	0.034	0.034	0.060	1.750	1.767	0.017	0.060	On-Line
03/30/05 08:25 AM	2	0.000	0.044	0.044	0.060	1.750	1.762	0.012	0.060	On-Line
03/31/05 08:25 AM	2	0.000	0.034	0.034	0.060	1.750	1.758	0.008	0.060	On-Line
04/01/05 08:25 AM	2	0.000	0.034	0.034	0.060	1.750	1.758	0.008	0.060	On-Line
04/02/05 08:25 AM	2	0.000	0.034	0.034	0.060	1.750	1.761	0.011	0.060	On-Line

The 7-Day Drift Test has been passed.

ATTACHMENT C

BOILER NO. 8
SUBPART DDDDD TEST REPORT

ACE
AIR CONSULTING
& ENGINEERING, INC.

2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32653
(352) 335-1889 FAX (352) 335-1891

June 6, 2005

Mr. David Buff
Golder and Associates
6241 NW 23rd Street, Suite A
Gainesville, Florida 32653

RE: Boiler 8 Clewiston Plant

Dear David:

Enclosed are the test results of the inlet and outlet test for PM and HCl on Boiler 8 at the Clewiston Mill. Testing was conducted on March 26, 2005 at reduced liquid flow rate to the wet scrubber. These tests were performed concurrently with the RATA test runs 4 through 10. All data is presented in Table 1.

Since it was not possible to measure the flue gas velocity at the inlet location, the outlet flow rate was used to calculate the inlet mass emissions in pounds per hour. The heat input rate was calculated using the standard flow rate and the Fuel Factor, which was obtained from data of the fuel analysis performed by Hazen Research, Inc. Table 1 also summarizes Steam Rate, Flow Rate and Heat Input readings obtained from the plant data (CeDAR 1-Minute data) presented in Appendix E.

Respectfully,

AIR CONSULTING AND ENGINEERING, INC.

Dagmar Fick

Dagmar Fick
Mechanical Engineer

Enclosures

CC: David Buff, Golder Associates (1 copy)
ACE File: 238 04 01

Table 1. Particulate Matter and Hydrochloric Acid Emission Summary
Boiler 8 Inlet and Outlet
United States Sugar Corporation
Clewiston, Florida **With Reduced Liquid Flow Rate to Wet Scrubber**
March 26, 2005

					INLET				OUTLET					
Run Number	Time	Oxygen %	CO2 %	Fuel Factor dscf/MMBTU	Flow Rate dscfm	Heat Input MMBTUH	HCL Emissions lbs/hr	HCL Emissions lbs/MMBTU	Flow Rate dscfm	Heat Input MMBTUH	HCl Emissions lbs/hr	HCl Emissions lbs/MMBTU	PM Emissions lbs/hr	PM Emissions lbs/MMBTU
1	1048-1204	6.2	14.9	9435	205956	921.2	8.42	0.0091	205956	921.2	9.15	0.0099	3.12	0.0034
2	1438-1619	6.0	15.2	9631	204635	908.9	2.22	0.0024	204635	908.9	3.48	0.0038	6.22	0.0068
3	1723-1900	6.3	14.8	9803	208161	887.6	1.11	0.0013	208161	887.6	3.67	0.0041	6.95	0.0078
Average	--	6.2	15.0	9623	206251	905.9	3.92	0.0043	206251	905.9	5.44	0.0059	5.43	0.0060

lbs/MMBTU HCl = $\frac{[(mg)*(lbs/453,600mg)]*F\text{-}Factor*\ 20.9}{VMstd.}$

Heat Input = MMBTUH = $\frac{(dscfm * 60\ min/hr)}{F\text{-}Factor} * (20.9-\%O2)$

	Plant CEM Data		
Run	Steam Rate lbs/hr	Flow Rate dscfm	Heat Input MMBTUH
1	470930	216300	884.5
2	467580	213889	880.9
3	466000	219498	867.6
Average	468170	216562	877.7

APPENDIX A

PM AND HCL INLET EMISSION DATA

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	USSC - CLEWISTON MILL
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 INLET
DATE:	3/26/05

RUN NUMBER:	1		IMPINGER ml.	168.0
BEGIN TIME (hour : minute):	10:48 AM		SILICA GEL. gms.	12.5
END TIME (hour : minute):	12:04 PM		% O2:	6.20
TOTAL RUN TIME:	60	MINUTES	% CO2:	14.90
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9435
STACK PRESSURE:	29.57	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	964.271	CUBIC FT.		
INITIAL METER:	936.278	CUBIC FT.		
STACK AREA:	NA	SQ. FT.	FILTER mg.:	7056.1
PITOT Cp:	0.84		WASH mg.:	3.1
			HCL mg:	8.5

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	399189
AVG. SQ. RT. VEL. HEAD:	0.0479	VOLUMETRIC FLOW(WVSCFM):	81629
AVG. VEL. HEAD (in H2O):	0.3300	VOLUMETRIC FLOW(DSCFM):	205956
AVG. STACK TEMP. (F):	343.0	VOLUMETRIC FLOW(WSCFM):	287585
AVG. METER TEMP. (F):	77.1		
AVG. ORIFICE DIFFERENTIAL:	0.540	**PARTICULATE EMISSION DATA:**	
METER ACF:	27.993		
METER SCF:	27.492	POUNDS PER HOUR:	6995.300
MEASURED SCF MOISTURE:	8.496	POUNDS PER SCF.:	0.000566
MEASURED MOISTURE %:	23.61		
STACK TEMP. (deg. C):	172.8		
VAPOR PRESSURE:	248.0		
SATURATION MOISTURE %:	NA	POUNDS PER MMBTU:	7.5937
PERCENT WATER VAPOR:	23.61		
GAS MOLECULAR WT.(dry):	30.63		
GAS MOLECULAR WT.(wet):	27.65	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	42.380		
AVERAGE VELOCITY(FPS):	NA	POUNDS PER HOUR:	8.423
MMBTUH(if applicable):	921.20	POUNDS PER MMBTU:	0.0091
PERCENT ISOKINETIC:	NA		

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	USSC - CLEWISTON MILL
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 INLET
DATE:	3/26/05

RUN NUMBER:	2		IMPINGER ml.	222.0
BEGIN TIME (hour : minute):	2:38 PM		SILICA GEL. gms.	6.0
END TIME (hour : minute):	4:19 PM		% O2:	6.00
TOTAL RUN TIME:	60	MINUTES	% CO2:	15.20
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9631
STACK PRESSURE:	29.57	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	992.333	CUBIC FT.		
INITIAL METER:	964.847	CUBIC FT.		
STACK AREA:	NA	SQ. FT.	FILTER mg.:	4337.7
PITOT Cp:	0.84		WASH mg.:	4.0
			HCL mg:	2.2

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	400819
AVG. SQ. RT. VEL. HEAD:	0.5657	VOLUMETRIC FLOW(WVSCFM):	85243
AVG. VEL. HEAD (in H2O):	0.3200	VOLUMETRIC FLOW(DSCFM):	204635
AVG. STACK TEMP. (F):	334.0	VOLUMETRIC FLOW(WSCFM):	289879
AVG. METER TEMP. (F):	81.5		
AVG. ORIFICE DIFFERENTIAL:	0.520	**PARTICULATE EMISSION DATA:**	
METER ACF:	27.486		
METER SCF:	26.772	POUNDS PER HOUR:	4389.672
MEASURED SCF MOISTURE:	10.732	POUNDS PER SCF.:	0.000358
MEASURED MOISTURE %:	28.62		
STACK TEMP. (deg. C):	167.8		
VAPOR PRESSURE:	220.0		
SATURATION MOISTURE %:	NA	POUNDS PER MMBTU:	4.8298
PERCENT WATER VAPOR:	28.62		
GAS MOLECULAR WT.(dry):	30.67		
GAS MOLECULAR WT.(wet):	27.05	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	40.532		
AVERAGE VELOCITY(FPS):	NA	POUNDS PER HOUR:	2.224
MMBTUH(if applicable):	908.87	POUNDS PER MMBTU:	0.0024
PERCENT ISOKINETIC:	NA		

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	USSC - CLEWISTON MILL
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 INLET
DATE:	3/26/05

RUN NUMBER:	3		IMPINGER ml.	194.0
BEGIN TIME (hour : minute):	5:23 PM		SILICA GEL. gms.	8.0
END TIME (hour : minute):	7:00 PM		% O2:	6.34
TOTAL RUN TIME:	60	MINUTES	% CO2:	14.90
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9803
STACK PRESSURE:	29.57	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	1049.033	CUBIC FT.		
INITIAL METER:	992.990	CUBIC FT.		
STACK AREA:	NA	SQ. FT.	FILTER mg.:	3946.1
PITOT Cp:	0.84		WASH mg.:	2.9
			HCL mg:	2.2

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	395735
AVG. SQ. RT. VEL. HEAD:	0.5292	VOLUMETRIC FLOW(WVSCFM):	78597
AVG. VEL. HEAD (in H2O):	0.2800	VOLUMETRIC FLOW(DSCFM):	208161
AVG. STACK TEMP. (F):	338.7	VOLUMETRIC FLOW(WSCFM):	286758
AVG. METER TEMP. (F):	82.6		
AVG. ORIFICE DIFFERENTIAL:	0.460	**PARTICULATE EMISSION DATA:**	
METER ACF:	56.043		
METER SCF:	54.471	POUNDS PER HOUR:	1996.185
MEASURED SCF MOISTURE:	9.508	POUNDS PER SCF.:	0.00016
MEASURED MOISTURE %:	14.86		
STACK TEMP. (deg. C):	170.4		
VAPOR PRESSURE:	234.2		
SATURATION MOISTURE %:	NA		
PERCENT WATER VAPOR:	14.86		
GAS MOLECULAR WT.(dry):	30.64		
GAS MOLECULAR WT.(wet):	28.76	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	43.867		
AVERAGE VELOCITY(FPS):	NA	POUNDS PER HOUR:	1.112
MMBTUH(if applicable):	887.58	POUNDS PER MMBTU:	0.0013
PERCENT ISOKINETIC:	NA		

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: USSC - CLEWISTON MILL
LOCATION: CLEWISTON, FLORIDA
SOURCE: BOILER 8 INLET
DATE: 3/26/05
RUN NUMBER: 1 **FROM:** 10:48 **TO:** 12:04

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	1.25	0.33	0.54	0.54	344	73
1 - 2	3.75		0.00		342	73
1 - 3	6.25		0.00		344	74
1 - 4	8.75		0.00		342	74
1 - 5	11.25		0.00		342	76
1 - 6	13.75		0.00		342	76
1 - 7	16.25		0.00		341	78
1 - 8	18.75		0.00		341	78
1 - 9	21.25		0.00		341	79
1 - 10	23.75		0.00		344	81
1 - 11	26.25		0.00		348	81
1 - 12	28.75		0.00		345	82
AVERAGES:		0.330	0.540		343.00	77.08

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: USSC - CLEWISTON MILL
LOCATION: CLEWISTON, FLORIDA
SOURCE: BOILER 8 INLET
DATE: 3/26/05
RUN NUMBER: 2 **FROM:** 14:38 **TO:** 16:19

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	1.25	0.32	0.52	0.52	334	78
1 - 2	3.75	0.32			348	79
1 - 3	6.25	0.32			328	79
1 - 4	8.75	0.32			333	80
1 - 5	11.25	0.32			333	81
1 - 6	13.75	0.32			331	81
1 - 7	16.25	0.32			332	82
1 - 8	18.75	0.32			334	82
1 - 9	21.25	0.32			330	83
1 - 10	23.75	0.32			332	84
1 - 11	26.25	0.32			336	84
1 - 12	28.75	0.32			337	85
AVERAGES:		0.320		0.520	334.00	81.50

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME:	USSC - CLEWISTON MILL				
LOCATION:	CLEWISTON, FLORIDA				
SOURCE:	BOILER 8 INLET				
DATE:	3/26/05				
RUN NUMBER:	3	**FROM:**	17:23	**TO:**	19:00

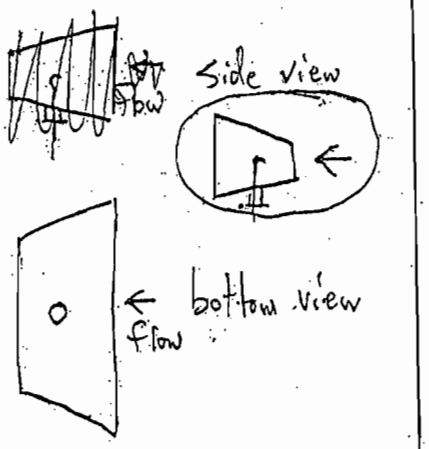
SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	1.25	0.28	0.46	0.46	338	82
1 - 2	3.75	0.28	0.46		336	82
1 - 3	6.25	0.28	0.46		333	82
1 - 4	8.75	0.28	0.46		338	82
1 - 5	11.25	0.28	0.46		338	82
1 - 6	13.75	0.28	0.46		338	83
1 - 7	16.25	0.28	0.46		336	83
1 - 8	18.75	0.28	0.46		340	83
1 - 9	21.25	0.28	0.46		340	83
1 - 10	23.75	0.28	0.46		332	83
1 - 11	26.25	0.28	0.46		354	83
1 - 12	28.75	0.28	0.46		341	83
AVERAGES:		0.280	0.460		338.67	82.58

PLANT US Sugar Corporation
SOURCE Boiler 8 scrubber inlet
PLANT LOCATION Clewiston, FL
TYPE OF SAMPLING TRAIN Modified method 5, 26
TYPE OF SAMPLES Particulate (ash), HCl; efficiency test
DATE 5/26/05 RUN NUMBER ~~Eff~~-inl-1
TIME START 1048 TIME END ~~1200~~ 1204
SAMPLE TIME 60/1 (MIN/PT)= 60 TOTAL MIN
ASSUMED MOISTURE(%) 23 FDA .77
NOMOGRAPH Cf D PITOT Cf
Pb ("Hg) 29.97 Ps ("Hg) 29.57
WEATHER Scattered TEMP (F) 70's
METER BOX NO. 2 H 1.5103 Y 0.9964
NOZZLE IDENTIFICATION NO. .25 Glass
NOZZLE CAL ___/___/___ = .256
STACK DIMENSIONS
STACK AREA (FT2) EFFECTIVE (FT2)
STACK DIAMETERS:(UPSTREAM) — (DOWNSTREAM) —
PORT SIZE 6" NIPPLE LENGTH "6"
STACK HEIGHT (FT) "12' UMBILICAL LENGTH 200'
AGENCY OBSERVER(S)
TEST COORDINATOR(S) Dave Buff
V. E. OBSERVER

ACE AIR CONSULTING & ENGINEERING, INC.
2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

STACK CONFIGURATION



REMARKS: Simultaneous w/outlet test; test for efficiency, HCl

TEST ID Efficiency Inlet-1
PAGE 1 OF 2
MATERIAL PROCESSING RATE
GAS METER READINGS: FINAL 964.271 (FT3)
INITIAL 936.278 (FT3)
NET 27.993 (FT3)
FILTER NO. 2617 IMP. VOL.GAIN 168 (ml)
SILICA GEL NO. 66 WT. GAIN 12.5 (ml)
TOTAL CONDENSATE 180.5 (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo=_____ Fo RANGE=_____ ORSAT ANALYZER _____

LEAK CHECKS
PRE 0.00 CFM 16 ("Hg) POST 0.00 CFM 15 ("Hg)
METER BOX/PUMP ✓ GAS SYSTEM ✓ ORSAT BAG —
PITOT TUBE NO. ~~72~~ PRE-TEST LEAK CHECK ✓
POST TEST (+) 0.00 / 8 "H20 (15 SECONDS)
POST TEST (-) 0.00 / 10.0 "H20 (15 SECONDS)
PYROMETER NUMBER ATK-5
BOX OPERATOR Gelston PROBE HOLDER Myre/Kickton

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O) CALC.	METER ORIFICE PRESS. DIFF.("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1-1		1048	936.278	.33	.54	.54	344	271	66	73	3.0
		1053	938.7	.33	.54	.54	342	270	58	73	4.5
		1058	941.0	.33	.54	.54	344	270	58	74	6.0
		1109	943.533	.33	.54	.54	342	272	66	74	4.0
		1114	945.72	.33	.54	.54	342	271	61	76	4.0
		1119	948.01	.33	.54	.54	342	270	61	76	4.0

BEST AVAILABLE COPY

AIR CONSULTING & ENGINEERING, INC.

TEST ID Efficiency Inlet

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
1-1		1128	950.333	.33	.54	.54	341	238	65	78	3.5
↓		1133	952.67	.33	.54	.54	341	266	60	78	3.5
		1138	954.99	.33	.54	.54	341	266	61	79	4.0
		1149	957.280	.33	.54	.54	344	271	66	81	3.5
		1154	959.66	.33	.54	.54	348	272	61	81	3.0
		1159	961.97	.33	.54	.54	345	265	60	82	3.5
		1204	964.271								

PLANT U.S. Sugar Clewiston

SOURCE Boiler 8 Scrubber inlet

PLANT LOCATION Clewiston, FL

TYPE OF SAMPLING TRAIN Modified method 5/26

TYPE OF SAMPLES Ash (efficiency test), HCl

DATE 3/26/05 RUN NUMBER Eff-inl-2

TIME START 1438 TIME END 1619

SAMPLE TIME 60 / 1 (MIN/PT)= 60 TOTAL MIN

ASSUMED MOISTURE(%) 23 FDA .77

NOMOGRAPH Cf 1.63 PITOT Cf .84

Pb ("Hg) 29.97 Ps ("Hg) 29.57

WEATHER Scattered TEMP (F) 70's

METER BOX NO. 2 H 1.5103 Y 0.9964

NOZZLE IDENTIFICATION NO. Glass .25

NOZZLE CAL .257 / .256 / .256 = .256

STACK DIMENSIONS

STACK AREA (FT2) EFFECTIVE (FT2)

STACK DIAMETERS:(UPSTREAM) none (DOWNSTREAM) none

PORT SIZE 6" NIPPLE LENGTH 6"

STACK HEIGHT (FT) 12' UMBILICAL LENGTH 200'

AGENCY OBSERVER(S)

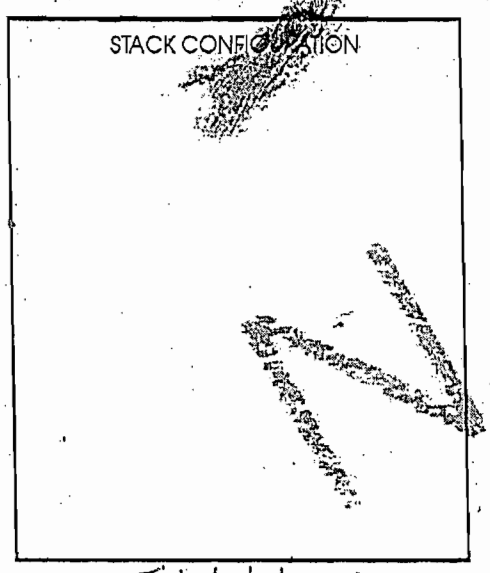
TEST COORDINATOR(S) Dave Buff

V. E. OBSERVER

ACE AIR CONSULTING & ENGINEERING, INC.

2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(904) 335-1889 - OFFICE / (904) 335-1891 - FAX

STACK CONFIGURATION



REMARKS: Substantial negative pressure duct (~-5.5)

TEST ID Blr 8 Eff/HCl-2

PAGE 1 OF 2

MATERIAL PROCESSING RATE

GAS METER READINGS: FINAL 992.353 (FT3)

INITIAL 964.847 (FT3)

NET 27.486 (FT3) 22

FILTER NO. 2619 IMP. VOL.GAIN (ml)

SILICA GEL NO. 78 WT. GAIN 6 (ml)

TOTAL CONDENSATE 228 (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo= Fo RANGE= ORSAT ANALYZER

LEAK CHECKS

PRE 0.00 CFM 16 ("Hg) POST 0.00 CFM 15 ("Hg)

METER BOX/PUMP ✓ GAS SYSTEM ✓ ORSAT BAG —

PITOT TUBE NO. 447 PRE-TEST LEAK CHECK ✓

POST TEST (+) 0.00 / 7.0 "H20 (15 SECONDS)

POST TEST (-) 0.00 / 6.2 "H20 (15 SECONDS)

PYROMETER NUMBER ATK-2

BOX OPERATOR Stetson PROBE HOLDER Hyre/Stetson

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O) CALC.	METER ORIFICE PRESS. DIFF.("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1-1		1436	964.847	.32	.52	.52	334	273	64	76	3.5
1-2		1443	967.30	.32	.52	.52	348	271	57	79	3.5
1-3		1448	969.53	.32	.52	.52	328	271	80	79	3.5
		1513	971.795	.32	.52	.52	333	270	66	80	4.0
↓		1518	974.09	.32	.52	.52	353	267	58	81	4.5
		1523	976.3	.32	.52	.52	331	264	59	81	4.5

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TEST ID DRO EOS/HCl-C

PAGE 2 OF 2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
		1531	978.546	.32	.52	.52	332	265	64	82	5.0
		1536	980.85	.32	.52	.52	334	261	60	82	5.5
		1541	983.11	.32	.52	.52	330	266	61	83	5.5
		1604	985.377	.32	.52	.52	332	264	68	84	5.5
		1609	987.81	.32	.52	.52	336	263	64	84	5.5
		1614	990.08	.32	.52	.52	337	263	59	85	6.0
		1619									

PLANT USSC

SOURCE Boiler 6

PLANT LOCATION Clewiston, FL

TYPE OF SAMPLING TRAIN Modified method 26/5

TYPE OF SAMPLES HCl; Efficiency test

DATE 3/26/2005 RUN NUMBER HCl-Eff-3

TIME START 1723 TIME END 1900

SAMPLE TIME 60 / 1 (MIN/PT)= 60 TOTAL MIN

ASSUMED MOISTURE(%) 23 FDA .77

NOMOGRAPH Cf 1.63 PITOT Cf .84

Pb ("Hg) 29.97 Ps ("Hg) 29.57

WEATHER Scattered TEMP (F) 70's

METER BOX NO. 2 H 1.5103 Y 0.9964

NOZZLE IDENTIFICATION NO. Glass .25

NOZZLE CAL .257 / .256 / .256 = .256

STACK DIMENSIONS ~~48"~~

STACK AREA (FT2) _____ EFFECTIVE (FT2) _____

STACK DIAMETERS:(UPSTREAM) — (DOWNSTREAM) —

PORT SIZE 6" NIPPLE LENGTH "6"

STACK HEIGHT (FT) "12' UMBILICAL LENGTH 200'

AGENCY OBSERVER(S) _____

TEST COORDINATOR(S) Dave Biff

V. E. OBSERVER _____

ACE AIR CONSULTING & ENGINEERING, INC.
2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

STACK CONFIGURATION

REMARKS: Simultaneous w/outlet test. (as are all 3/26/05 Clewiston)

NOTE: Both nozzles are glass and calibrate identically.

TEST ID B/S Eff/HCl-3

PAGE 1 OF 2

MATERIAL PROCESSING RATE _____

GAS METER READINGS: FINAL 1019.033 (FT3)

INITIAL 992.990 (FT3)

NET _____ (FT3)

FILTER NO. _____ IMP. VOL.GAIN 194 (ml)

SILICA GEL NO. ~~434~~ 803 WT. GAIN 6 (ml)

TOTAL CONDENSATE 202 (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					
%O2					
%CO					
%N2					

Fo=_____ Fo RANGE=_____ ORSAT ANALYZER _____

LEAK CHECKS

PRE 0.00 CFM 16 ("Hg) POST _____ CFM _____ ("Hg)

METER BOX/PUMP ✓ GAS SYSTEM ✓ ORSAT BAG —

PITOT TUBE NO. 47 PRE-TEST LEAK CHECK ✓

POST TEST (+) 0.00 / ~~0.00~~ 6.0 "H20 (15 SECONDS)

POST TEST (-) 0.00 / 5.9 "H20 (15 SECONDS)

PYROMETER NUMBER ATK-2

BOX OPERATOR Gelston PROBE HOLDER Gelston/Hyre

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O) CALC.	METER ORIFICE PRESS. DIFF.("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1-1		1723	992.990	.28	.46	.46	338	259	63	82	3.0
		1728	995.31	.28	.46	.46	336	260	59	82	3.0
		1733	997.46	.28	.46	.46	333	261	58	82	3.5
		1738	999.592	.28	.46	.46	338	258	66	82	3.5
		1750	1001.80	.28	.46	.46	338	258	60	82	4.0
↓		1755	1003.96	.28	.46	.46	338	257	59	83	4.0

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TEST ID UIr D ESP/HCl - 2

PAGE 2 OF 2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
		1814	1006.097	.28	.46	.46	336	256	65	83	4.0
		1819	1008.24	.28	.46	.46	340	256	60	83	4.0
		1824	1010.40	.28	.46	.46	340	257	60	83	4.0
		1845	1012.547	.28	.46	.46	332	257	67	83	4.0
		1850	1014.70	.28	.46	.46	354	256	61	83	4.0
		1855	1016.87	.28	.46	.46	341	242	60	83	4.0

AIR CONSULTING & ENGINEERING, INC.

PARTICULATE LAB DATA ANALYSIS

CLIENT / SOURCE IDENTIFICATION: US. Sugar-Clewiston Boiler # 8 EFF - Inlet

BALANCE CHECK:
1ST GROSS WEIGHT:
0.0 0.0 0.5 0.5000 10.0 10.0000 100.0 99.9998 DATE 3-29-05 TIME 1015 %RH 36 TEMP 67 BY: (INIT) CR

2ND GROSS WEIGHT:
0.0 0.0 0.5 0.5000 10.0 10.0000 100.0 99.9997 DATE 3-30-05 TIME 0910 %RH 32 TEMP 66 BY: (INIT) CR

RUN I.D.	FILTER / CONT. NO.	VOLUME (ml)	1ST GROSS WEIGHT (gm)	2ND GROSS WEIGHT (gm)	AVG. GROSS WEIGHT (gm)	TARE WEIGHT (gm)	SUB NET WEIGHT (gm)	BLANK (gm)	NET WEIGHT (mg)
1	2617	N/A	7.4032	7.4030	7.4031	0.3470	7.0561		7056.1
2	2619	"	4.6831	4.6834	4.6833	0.3456	4.3377		4337.7
3	2642	"	4.2920	4.2922	4.2921	0.3470	3.9461		3946.1
1	6	125	103.6290	103.6289	103.6290	103.6259	0.0031		3.1
2	9	110	105.4303	105.4301	106.4302	105.4262	0.0040		4.0
3	12	130	112.7828	112.7829	112.7829	112.7800	0.0029		2.9
BLANK	44	150	106.2258	106.2257	106.2258	106.2252	0.0006		0.6

APPENDIX B

PM AND HCL OUTLET EMISSION DATA

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	US SUGAR CORPORATION
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 Outlet
DATE:	MARCH 26, 2005

RUN NUMBER:	1		IMPINGER ml.	411.0
BEGIN TIME (hour : minute):	10:48 AM		SILICA GEL. gms.	15.0
END TIME (hour : minute):	12:04 PM		% O2:	6.20
TOTAL RUN TIME:	60	MINUTES	% CO2:	14.90
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9435
STACK PRESSURE:	29.97	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	872.225	CUBIC FT.		
INITIAL METER:	821.100	CUBIC FT.		
STACK AREA:	93.599	SQ. FT.	FILTER mg.:	2.6
PITOT Cp:	0.84		WASH mg.:	3.2
			HCL mg:	17

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	399189
AVG. SQ. RT. VEL. HEAD:	1.0403	VOLUMETRIC FLOW(WVSCFM):	81629
AVG. VEL. HEAD (in H2O):	1.0833	VOLUMETRIC FLOW(DSCFM):	205956
AVG. STACK TEMP. (F):	273.8	VOLUMETRIC FLOW(WSCFM):	287585
AVG. METER TEMP. (F):	74.6		
AVG. ORIFICE DIFFERENTIAL:	1.942	**PARTICULATE EMISSION DATA:**	
METER ACF:	51.125		
METER SCF:	50.592	POUNDS PER HOUR:	3.123
MEASURED SCF MOISTURE:	20.052	POUNDS PER SCF.:	2.52739E-07
MEASURED MOISTURE %:	28.38	GRAINS PER SCF.:	0.0018
STACK TEMP. (deg. C):	134.4	GRAINS PER SCF @ 7% O2:	0.0017
VAPOR PRESSURE:	90.4	GRAINS PER SCF @ 50% E.A.:	0.0017
SATURATION MOISTURE %:	NA	POUNDS PER MMBTU:	0.0034
PERCENT WATER VAPOR:	28.38		
GAS MOLECULAR WT.(dry):	30.63		
GAS MOLECULAR WT.(wet):	27.05	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	42.380		
AVERAGE VELOCITY(FPS):	71.1	POUNDS PER HOUR:	9.154
MMBTUH(if applicable):	921.20	POUNDS PER MMBTU:	0.0099
PERCENT ISOKINETIC:	107.23		

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	US SUGAR CORPORATION
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 Outlet
DATE:	MARCH 26, 2005

RUN NUMBER:	2		IMPINGER ml.	432.0
BEGIN TIME (hour : minute):	2:38 PM		SILICA GEL. gms.	15.0
END TIME (hour : minute):	4:19 PM		% O2:	6.00
TOTAL RUN TIME:	60	MINUTES	% CO2:	15.17
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9631
STACK PRESSURE:	29.97	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	924.143	CUBIC FT.		
INITIAL METER:	872.700	CUBIC FT.		
STACK AREA:	93.599	SQ. FT.	FILTER mg.:	5.4
PITOT Cp:	0.84		WASH mg.:	6.2
			HCL mg:	6.5

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	400819
AVG. SQ. RT. VEL. HEAD:	1.0446	VOLUMETRIC FLOW(WVSCFM):	85243
AVG. VEL. HEAD (in H2O):	1.0917	VOLUMETRIC FLOW(DSCFM):	204635
AVG. STACK TEMP. (F):	271.0	VOLUMETRIC FLOW(WSCFM):	289879
AVG. METER TEMP. (F):	78.8		
AVG. ORIFICE DIFFERENTIAL:	1.975	**PARTICULATE EMISSION DATA:**	
METER ACF:	51.443		
METER SCF:	50.509	POUNDS PER HOUR:	6.216
MEASURED SCF MOISTURE:	21.040	POUNDS PER SCF.:	5.06306E-07
MEASURED MOISTURE %:	29.41	GRAINS PER SCF.:	0.0035
STACK TEMP. (deg. C):	132.8	GRAINS PER SCF @ 7% O2:	0.0033
VAPOR PRESSURE:	86.3	GRAINS PER SCF @ 50% E.A.:	0.0033
SATURATION MOISTURE %:	NA	POUNDS PER MMBTU:	0.0068
PERCENT WATER VAPOR:	29.41		
GAS MOLECULAR WT.(dry):	30.67		
GAS MOLECULAR WT.(wet):	26.94	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	40.510		
AVERAGE VELOCITY(FPS):	71.4	POUNDS PER HOUR:	3.483
MMBTUH(if applicable):	908.87	POUNDS PER MMBTU:	0.0038
PERCENT ISOKINETIC:	107.74		

AIR CONSULTING and ENGINEERING, INC.
COMPLETE EMISSION DATA

COMPANY NAME:	US SUGAR CORPORATION
LOCATION:	CLEWISTON, FLORIDA
SOURCE:	BOILER 8 Outlet
DATE:	MARCH 26, 2005

RUN NUMBER:	3		IMPINGER ml.	390.0
BEGIN TIME (hour : minute):	5:23 PM		SILICA GEL. gms.	1.0
END TIME (hour : minute):	7:00 PM		% O2:	6.34
TOTAL RUN TIME:	60	MINUTES	% CO2:	14.84
BAROMETRIC PRESSURE:	29.97	inches Hg.	"F" FACTOR:	9803
STACK PRESSURE:	29.97	inches Hg.		
NOZZLE DIAMETER:	0.256	INCHES		
METER CORR. FACTOR:	0.996		PARTICULATE DATA	
FINAL METER:	974.362	CUBIC FT.		
INITIAL METER:	924.700	CUBIC FT.		
STACK AREA:	93.599	SQ. FT.	FILTER mg.:	5.1
PITOT Cp:	0.84		WASH mg.:	7.2
			HCL mg:	6.5

EMISSION RESULTS

NOZZLE AREA (SQ. FT.):	0.000357	VOLUMETRIC FLOW(ACFM):	395735
AVG. SQ. RT. VEL. HEAD:	1.0366	VOLUMETRIC FLOW(WVSCFM):	78597
AVG. VEL. HEAD (in H2O):	1.0750	VOLUMETRIC FLOW(DSCFM):	208161
AVG. STACK TEMP. (F):	269.6	VOLUMETRIC FLOW(WSCFM):	286758
AVG. METER TEMP. (F):	78.8		
AVG. ORIFICE DIFFERENTIAL:	1.829	**PARTICULATE EMISSION DATA:**	
METER ACF:	49.662		
METER SCF:	48.743	POUNDS PER HOUR:	6.948
MEASURED SCF MOISTURE:	18.404	POUNDS PER SCF.:	5.5631E-07
MEASURED MOISTURE %:	27.41	GRAINS PER SCF.:	0.0039
STACK TEMP. (deg. C):	132.0	GRAINS PER SCF @ 7% O2:	0.0037
VAPOR PRESSURE:	84.3	GRAINS PER SCF @ 50% E.A.:	0.0037
SATURATION MOISTURE %:	NA	POUNDS PER MMBTU:	0.0078
PERCENT WATER VAPOR:	27.41		
GAS MOLECULAR WT.(dry):	30.63		
GAS MOLECULAR WT.(wet):	27.17	**HCL EMISSIONS:**	
PERCENT EXCESS AIR:	43.819		
AVERAGE VELOCITY(FPS):	70.5	POUNDS PER HOUR:	3.672
MMBTUH(if applicable):	887.58	POUNDS PER MMBTU:	0.0041
PERCENT ISOKINETIC:	102.21		

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: US SUGAR CORP
LOCATION: CLEWISTON, FL
SOURCE: BOILER 8 EFFICIENCY OUTLET
DATE: 26-Mar-05
RUN NUMBER: 1 **FROM:** 10:48 **TO:** 12:04

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	38.76	1.00	1.75	1.75	276	69
1 - 2	19.18	1.00	1.75	1.75	276	70
1 - 3	5.71	1.10	1.93	2.00	275	70
2 - 1		1.20	2.10	2.10	275	72
2 - 2		1.20	2.10	2.10	275	73
2 - 3		1.10	1.93	2.00	275	74
3 - 1		1.10	1.93	2.00	273	75
3 - 2		1.10	1.93	2.00	273	76
3 - 3		1.00	1.75	1.80	272	78
4 - 1		1.10	1.93	2.00	271	79
4 - 2		1.10	1.93	2.00	272	79
4 - 3		1.00	1.75	1.80	273	80
AVERAGES:		1.083		1.942	273.83	74.58

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: US SUGAR CORP
LOCATION: CLEWISTON, FL
SOURCE: BOILER 8 EFFICIENCY OUTLET
DATE: 26-Mar-05
RUN NUMBER: 2 **FROM:** 14:38 **TO:** 16:19

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	38.76	1.10	1.93	2.00	273	75
1 - 2	19.18	1.10	1.93	2.00	274	75
1 - 3	5.71	1.00	1.75	1.80	273	76
2 - 1		1.10	1.93	2.00	270	77
2 - 2		1.10	1.93	2.00	270	77
2 - 3		1.00	1.75	1.80	270	78
3 - 1		1.20	2.10	2.10	269	80
3 - 2		1.10	1.93	2.00	271	81
3 - 3		1.10	1.93	2.00	271	81
4 - 1		1.10	1.93	2.00	270	82
4 - 2		1.10	1.93	2.00	270	82
4 - 3		1.10	1.93	2.00	271	82
AVERAGES:		1.092	1.975		271.00	78.83

AIR CONSULTING and ENGINEERING, INC.

COMPANY NAME: US SUGAR CORP
LOCATION: CLEWISTON, FL
SOURCE: *BOILER 8 EFFICIENCY OUTLET*
DATE: 26-Mar-05
RUN NUMBER: 3 **FROM:** 17:23 **TO:** 19:00

SOURCE PARAMETER ENTRIES

PORT-POINT	"inches"	VELOCITY HEAD	ORIFICE CALC.	DELTA P ACTUAL	STACK TEMP. F	METER TEMP.F
1 - 1	38.76	1.10	1.93	2.00	273	78
1 - 2	19.18	1.10	1.93	2.00	273	77
1 - 3	5.71	1.00	1.75	1.75	272	78
2 - 1		1.10	1.93	2.00	273	78
2 - 2		1.10	1.93	2.00	273	78
2 - 3		1.10	1.93	2.00	273	79
3 - 1		1.10	1.93	1.75	274	79
3 - 2		1.10	1.93	1.75	273	79
3 - 3		1.00	1.75	1.60	273	80
4 - 1		1.10	1.93	1.75	264	80
4 - 2		1.10	1.93	1.75	267	80
4 - 3		1.00	1.75	1.60	247	80
AVERAGES:		1.075	1.829		269.58	78.83

AIR CONSULTING and ENGINEERING, INC.
SAMPLE CALCULATIONS

US SUGAR CORPORATION
CLEWISTON, FLORIDA
BOILER 8 Outlet
MARCH 26, 2005

RUN NUMBER: 1

NOZZLE AREA SQ.FT.:
An=Pi*(Rn)E2 = Pi*(Dn/2)E2 = Pi*[(Dn/2)E2]*[(1ft/12in)E2]
=Pi*(Dn)E2 / (576) = (3.1416)*[(0.256)E2]/(576)
= 0.000357

METER ACTUAL CU. FEET:
Vm = (Vm final) - (Vm initial)
= (872.225) - (821.1)
= 51.125

METER STANDARD CU. FEET:
VMstd=(K1)*(Vm)*(Y)*{(Pbar)+[(DHavg)/(13.6)]}/[(TMavg)+(460)]
= (17.64)*(51.125)*(0.9959)*{(29.97)+[(1.94)/(13.6)]}/[(74.6)+(460)]
= 50.592

MEASURED SCF MOISTURE:
VWstd=(K2)*(Vlc)
= (0.04707)*(411 + 15)
= 20.052

MEASURED % MOISTURE:
Bwm%={(VWstd)/[(VMstd)+(VWstd)]}*100%
= {(20.052)/[(50.592)+(20.052)]}*100%
= 28.38%

STACK TEMP. Deg C
Tsc=[(TSavg)-32]*5/9
= [(273.8)-32]*5/9
= 134.4

VAPOR PREASURE (in Hg):
Pv={2.718E[18.6866-0.00244*(273+(Tsc))-4509.47/(273+(Tsc))-
149541/((273+(Tsc))E2)]}/3.375
= {2.718E[18.688-0.00244*(273+(134.4))-4509.47/(273+(134.4))-
149541/((273+(134.4))E2)]}/3.375
= 90.4

SATURATION MOISTURE %:
Bwsat%=NA
NA
NA

PERCENT WATER VAPOR:
Bwo% = Bwm% IF Bwm% < Bwsat%
Bwo% = Bwsat% IF Bwsat% < Bwm%
= 28.38

GAS MOLECULAR WT.(dry):
Md = [(0.440)*(%CO2)]+[(0.320)*(%O2)]+{(0.280)*[(%N2)+(%CO)]}
= [(0.440)*(%CO2)]+[(0.320)*(%O2)]+{(0.280)*[(100)-(%CO2)-(%O2)]}
= [(0.440)*(14.9)]+[(0.032)*(6.2)]+{(0.280)*(78.9)]}
= 30.6

GAS MOLECULAR WT.(wet):
Ms= {(Md)*[1-(Bwo%/100)]}+[(18.0)*(Bwo%/100)]
= {(30.6)*[1-(0.2838)]}+[(18.0)*(0.2838)]
= 27.05

PERCENT EXCESS AIR:
%EA={(%O2)/{[(0.264)*(%N2)]-(%O2)}}*(100%)
= {(6.2)/{[(0.264)*(78.9)]-(6.2)}}*(100%)
= 42.38

AVERAGE VELOCITY(FPS): VSavg=(85.48)*(Cp)*(ASRVH)*{[(TSavg)+(460)]/[(Ms)*(Ps)]}E1/2
= (85.48)*(0.84)*(1.04)*{[(273.8)+(460)]/[(27)*(29.97)]}E1/2
= 71.08

PERCENT ISOKINETIC: %Iso={(K4)*(TSavg+460)*(VMstd)/{(Ps)*(Vs)*(An)*(time)*[1-(Bwo%/100)]}
*100

={ (0.09450)*(273.8+460)*(50.592)/{(29.97)*(71.08)*(0.000357)*(60)*[1-(28.38/100)]} }*100%
= 107.2

VOLUMETRIC FLOW(ACFM): QS=(VSavg)*(As)*(60)
= (71.08)*(93.599)*(60)
= 399189.3

VOLUMETRIC FLOW(WVSCFM): WVSCFM=(QS)*(17.64)*(Bwo%/100)*(Ps)/(TSavg+460)
= (399189.3)*(17.64)*(28.38/100)*(29.97)/(273.8+460)
= 81629.2

VOLUMETRIC FLOW(DSCFM): QSstd=(QS)*(17.64)*[1-(Bwo%/100)]*(Ps)/(TSavg+460)
= (399189.3)*(17.64)*[1-(28.38/100)]*(29.97)/(273.8+460)
= 205956.2

PARTICULATE EMISSION DATA:

POUNDS PER HOUR: lb/Hr=(mg)*(QSstd)*(60)/[(VMstd)*(453600)]
= (5.8)*(205956.2)*(60)/[(50.592)*(453600)]
= 3.123

POUNDS PER SCF.: lb/SCF=(lb/Hr)/[(60)*(QSstd)]
= (3.123/[(60)*(205956.2)]
= 0

GRAINS PER SCF.: Gr/SCF=(lb/SCF)*(7000)
= (0)*(7000)
= 0.002

GRAINS PER SCF @ 7% O2: =(Gr/SCF)*(20.9-7.0)/[(20.9)-(%O2)]
= (0.002)*(13.9)/[(20.9)-(6.2)]
= 0.002

GRAINS PER SCF @ 50% E.A.: =(Gr/SCF)*[(100)+(%EA)]/(150)
= (0.002)*[(100)+(42.38)]/(150)
= 0.002

POUNDS PER MMBTU: =(lb/SCF)*(F)*(20.9)/[(20.9)-(%O2)]
= (0)*(9435)*(20.9)/[(20.9)-(6.2)]
= 0.003

AIR CONSULTING and ENGINEERING, INC.
NOMENCLATURE

%CO - Percent Carbon Monoxide.
%CO2 - Percent Carbon Dioxide.
%EA - Percent excess air.
%Iso - Percent isokenetics.
%N2 - Percent Nitrogen.
%O2 - Percent Oxygen.
An - Area of the nozzle, square feet.
As - Stack area, square feet.
ASRVH - Average of the square roots of the velocity heads.
Bwm% - Percent water vapor as measured.
Bwo% - Percent water vapor.
Bwsat% - Percent water vapor at saturation.
C3H8 - Propane.
CH4 - Methane.
CO - Carbon Monoxide
CO - Carbon Monoxide.
CO2 - Carbon Dioxide
Cp - Pitot coefficient.
CSO2 - Concentration of Sulfur Dioxide, pounds per dry standard cubic foot.
DHavg - Average meter orifice pressure differential.
Dn - Nozzle diameter.
E - Denotes exponent.
F - Fuel factor,standard cubic feet per million BTU.
Gr/SCF - Grains per dry standard cubic foot.
Hr - Hour.
K1 - A constant =17.64.
K2 - A constant = 0.04707.
K4 - A constant = 0.09450.
lb - pound.
lb/Hr - pounds per hour.
lb/MMBTU - Pounds per million British Thermal Units.
lb/SCF - Pounds per dry standard cubic foot.
Md - Molecular weight of dry stack gas.
mg - Mass of filter and dried probe wash, milligrams.
MMBTU - million British Thermal Units.
Ms - Molecular weight of wet stack gas.
NOx - Oxides of Nitrogen.
Pbar - Barometric pressure, inches of Mercury.
Pi - A constant = 3.14159....
PPM - Parts per million.
Ps - Stack pressure, inches Mercury.
Pv - Vapor pressure of water at stack temperature, inches Mercury.
Qs - Volumetric flow rate, actual cubic feet per minute.
QSstd - Volumetric flow rate, dry standard cubic feet per minute.
Rn - Nozzle radius, inches.
SCF - Standard cubic feet.
SO2 - Sulfur Dioxide.
TMavg - Average meter temperature, degrees Fahrenheit.
TSavg - Average stack temperature, degrees Fahrenheit.
Tsc - Average stack temperature, degrees Celsius.

Vlc - Volume of moisture collected in the impingers and silica gel, milliliters.
Vm - Metered volume, actual cubic feet.
Vm final - Final meter reading, actual cubic feet.
Vm initial - Initial meter reading, actual cubic feet.
VMstd - Metered volume corrected to standard conditions, standard cubic feet.
VOC - Volitile organic compounds.
VSavg - Average stack velocity, feet per second.
VWstd - Standard volume of water vapor, standard cubic feet.
WVSCFM - Volumetric flow rate of water vapor, standard cubic feet per minute.
Y - Meter correction factor.

PLANT USSC

SOURCE Boiler #8 stack

PLANT LOCATION Clewiston FL.

TYPE OF SAMPLING TRAIN EPA 26A

TYPE OF SAMPLES PM/HCl

DATE 3/26/05 RUN NUMBER 1

TIME START 1048 TIME END 1204

SAMPLE TIME 5 / 12 (MIN/PT)= 60 TOTAL MIN.

ASSUMED MOISTURE(%) 25.5 FDA 24.5

NOMOGRAPH Cf 1.75 PITOT Cf .84

Pb ("Hg) 29.97 Ps ("Hg) 29.97

WEATHER _____ TEMP (F) _____

METER BOX NO. 4 H 1.5358 Y 0.9959

NOZZLE IDENTIFICATION NO. Glass .250

NOZZLE CAL .256 / .255 / .256 = .256

STACK DIMENSIONS 131" ID

STACK AREA (FT2) 93.599 EFFECTIVE (FT2) _____

STACK DIAMETERS: (UPSTREAM) L8 (DOWNSTREAM) L2

PORT SIZE 6" NIPPLE LENGTH 6"

STACK HEIGHT (FT) 200' UMBILICAL LENGTH 200'

AGENCY OBSERVER(S) _____

TEST COORDINATOR(S) _____

V. E. OBSERVER _____

ACE AIR CONSULTING & ENGINEERING, INC.
2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

STACK CONFIGURATION

335
076
411

REMARKS: _____

TEST ID USSCB8SHCLR1

MATERIAL PROCESSING RATE _____

GAS METER READINGS: FINAL 872.225 (FT3)

INITIAL 821.100 (FT3)

NET _____ (FT3)

FILTER NO. 2616 IMP. VOL GAIN 411 (ml)

SILICA GEL NO. 99 WT. GAIN 15 (ml)

TOTAL CONDENSATE _____ (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					14.9
%O2					6.2
%CO					
%N2					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____

LEAK CHECKS

PRE 0.00 CFM 15 ("Hg) POST 0.00 CFM 10 ("Hg)

METER BOX/PUMP V GAS SYSTEM V ORSAT BAG none

PITOT TUBE NO. 47 PRE-TEST LEAK CHECK OK

POST TEST (+) 3.6 / 3.6 "H20 (15 SECONDS)

POST TEST (-) 3.1 / 3.1 "H20 (15 SECONDS)

PYROMETER NUMBER ATK2

BOX OPERATOR RH PROBE HOLDER T.F.

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF. ("H2O) CALC.	METER ORIFICE PRESS. DIFF. ("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1 - 1	0	10:48	821.00	1.0	1.75	1.75	276	256	65.1	69	3
2	5	10:53	825.1	1.0	1.75	1.75	276	238	65	70	3
3	10	10:58	829.26	1.1	1.92	2.0	275	233	66	70	3.5
2 - 1	15	11:09	833.496	1.2	2.1	2.1	275	243	67	72	4
2	20	11:14	837.85	1.2	2.1	2.1	275	228	66	73	4
3	25	11:19	842.28	1.1	1.92	2.0	275	232	64	74	4

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TEST ID USSC BBS HCLK 1

PAGE _____ OF _____

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
3 - 1	30	11:28	846.635	1.1	1.92	2.0	273	228	67	75	3.5
2	35	11:33	850.93	1.1	1.92	2.0	273	249	66	76	4
3	40	11:38	855.25	1.0	1.75	1.8	272	253	65	78	4
4 - 1	45	11:44	859.414	1.1	1.92	2.0	271	230	65	79	4
2	50	11:54	863.70	1.1	1.92	2.0	272	243	66	79	4
3	55	1:59	868.07	1.0	1.75	1.8	273	229	65	80	4.5
	End	12:04	872.225								

PLANT USSC Clewiston
SOURCE Boiler #8 Stack
PLANT LOCATION Clewiston FL.
TYPE OF SAMPLING TRAIN ~~PM/HEI~~ EPA 26A
TYPE OF SAMPLES PM/HEI
DATE 3/26/05 RUN NUMBER 2
TIME START 14:38 TIME END 16:19
SAMPLE TIME 5 / 12 (MIN/PT)= 60 TOTAL MIN
ASSUMED MOISTURE(%) 25.5 FDA 74.5
NOMOGRAPH Cf 1.75 PITOT Cf .84
Pb ("Hg) 29.97 Ps ("Hg) 29.97
WEATHER _____ TEMP (F) _____
METER BOX NO. 4 H 1.5358 Y 0.9959
NOZZLE IDENTIFICATION NO. G1455 .250
NOZZLE CAL .256 / .255 / .256 = .256
STACK DIMENSIONS 131" ID
STACK AREA (FT2) _____ EFFECTIVE (FT2) _____
STACK DIAMETERS:(UPSTREAM) ~8 (DOWNSTREAM) ~2
PORT SIZE 6" NIPPLE LENGTH 6"
STACK HEIGHT (FT) 200' UMBILICAL LENGTH 200'
AGENCY OBSERVER(S) _____
TEST COORDINATOR(S) _____
V. E. OBSERVER _____

ACE AIR CONSULTING & ENGINEERING, INC.
2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

STACK CONFIGURATION

200
110
122
452

6.54
5.39
11.93
÷2
~6.0

15.83
14.51
30.34
15.17

REMARKS: _____

TEST ID USSCB8SHCIR2
PAGE 1 OF 2
MATERIAL PROCESSING RATE _____
GAS METER READINGS: FINAL 924.143 (FT3)
INITIAL 872.700 (FT3)
NET _____ (FT3)
FILTER NO. 2618 IMP. VOLGAIN 432 (ml)
SILICA GEL NO. 540 WT. GAIN 15 (ml)
TOTAL CONDENSATE _____ (ml)

ORSAT

	1	2	3	4	AVG.
%CO2				15.17	~~14.51~~
%O2				6.0	~~6.64~~
%CO					
%N2					

Fo= _____ Fo RANGE= _____ ORSAT ANALYZER _____
LEAK CHECKS
PRE 0.00 CFM 9 ("Hg) POST 0.00 CFM 8 ("Hg)
METER BOX/PUMP V GAS SYSTEM V ORSAT BAG None
PITOT TUBE NO. 47 PRE-TEST LEAK CHECK OK
POST TEST (+) 2.9 / 2.9 "H20 (15 SECONDS)
POST TEST (-) 3.3 / 3.3 "H20 (15 SECONDS)
PYROMETER NUMBER 4TK-2
BOX OPERATOR RH PROBE HOLDER T.F.

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O) CALC.	METER ORIFICE PRESS. DIFF.("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP. (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1 - 1		14:38	872.700	1.1	1.92	2.0	273	233	67	75	3.5
2		14:43	876.95	1.1	1.92	2.0	274	227	62	75	3.5
3		1448	881.32	1.0	1.75	1.8	273	234	63	76	3.5
2 - 1		15:13	885.500	1.1	1.92	2.0	270	226	62	77	3.5
2		15:18	889.77	1.1	1.92	2.0	270	229	64	77	4
3		12:23	894.09	1.0	1.75	1.8	270	234	65	78	4

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TEST ID USGC B8S1K1R2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
3 - 1		15:31	898.237	1.2	2.1	2.1	269	230	67	80	4
2		15:36	902.56	1.1	1.92	2.0	271	228	67	81	4.5
3		15:41	906.89	1.1	1.92	2.0	271	231	66	81	4.5
4 - 1		16:04	911.169	1.1	1.92	2.0	270	236	65	82	4.0
2		16:09	915.44	1.1	1.92	2.0	270	231	64	82	4.5
3		16:14	919.77	1.1	1.92	2.0	271	239	63	82	4.5
	End	16:19	924.143								

PLANT USSC

SOURCE Boiler #8 Stack

PLANT LOCATION Clewiston FL.

TYPE OF SAMPLING TRAIN EPA 26A

TYPE OF SAMPLES PM/HCl

DATE 3/26/05 RUN NUMBER 3

TIME START _____ TIME END _____

SAMPLE TIME 5 / 12 (MIN/PT)= 60 TOTAL MIN

ASSUMED MOISTURE(%) 25.5 FDA 74.5

NOMOGRAPH Cf 1.75 PITOT Cf .84

Pb ("Hg) 29.97 Ps ("Hg) 29.97

WEATHER _____ TEMP (F) _____

METER BOX NO. 4 H 1.5358 Y 0.9959

NOZZLE IDENTIFICATION NO. Glass .250

NOZZLE CAL .256 / .255 / .256 = .256

STACK DIMENSIONS 131" ID

STACK AREA (FT2) _____ EFFECTIVE (FT2) _____

STACK DIAMETERS:(UPSTREAM) <8 (DOWNSTREAM) <2

PORT SIZE 6" NIPPLE LENGTH 6"

STACK HEIGHT (FT) 200 UMBILICAL LENGTH 200

AGENCY OBSERVER(S) _____

TEST COORDINATOR(S) _____

V. E. OBSERVER _____

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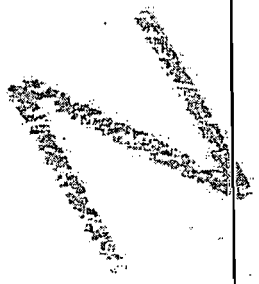
2106 NW 67TH PLACE SUITE 4
GAINESVILLE, FLORIDA 32653
(904) 335-1889 - OFFICE / (904) 335-1891 - FAX

STACK CONFIGURATION



REMARKS: _____

TEST ID USSCB8SHCLR3

MATERIAL PROCESSING RATE _____

GAS METER READINGS: FINAL 974.362 (FT3)

INITIAL 924.700 (FT3)

NET _____ (FT3)

FILTER NO. 2620 IMP. VOL.GAIN 390 (ml)

SILICA GEL NO. 438 WT. GAIN 1 (ml)

TOTAL CONDENSATE 391 (ml)

ORSAT

	1	2	3	4	AVG.
%CO2					14.84
%O2					6.34
%CO					
%N2					

Fo=_____ Fo RANGE=_____ ORSAT ANALYZER _____

LEAK CHECKS

PRE 0.00 CFM 10 ("Hg) POST 0.00 CFM 10 ("Hg)

METER BOX/PUMP V GAS SYSTEM V ORSAT BAG NONE

PITOT TUBE NO. 47 PRE-TEST LEAK CHECK OK

POST TEST (+) 3.8 / 3.8 "H20 (15 SECONDS)

POST TEST (-) 3.4 / 3.4 "H20 (15 SECONDS)

PYROMETER NUMBER ATK-2

BOX OPERATOR RH PROBE HOLDER T.F.

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O) CALC.	METER ORIFICE PRESS. DIFF.("H2O) ACTUAL	STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
1-1		17:23	924.700	1.1	1.92	2.0	273	228	67	88	3.5
2		17:28	928.99	1.1	1.92	2.0	273	256	62	87	3.5
3		17:33	933.38	1.0	1.75	1.75	272	240	60	88	3.5
2-1		17:45	937.608	1.1	1.92	2.0	273	227	66	88	3.4
2		1750	941.95	1.1	1.92	2.0	273	241	64	88	3.5
3		1755	946.27	1.1	1.92	2.0	273	238	61	89	3.5

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TEST ID USSCB85HCIR3

PAGE 2 OF 2

PORT & TRAVERSE PT. NUMBER	COMMENTS	CLOCK TIME	GAS METER READING (FT3)	STACK VELOCITY HEAD	METER ORIFICE PRESS. DIFF.("H2O)		STACK GAS TEMP (F)	SAMPLE BOX TEMP (F)	LAST IMPINGER TEMP (F)	DRY GAS METER TEMP (F)	VACUUM ON SAMPLE TRAIN ("Hg)
					CALC.	ACTUAL					
3- 1	Change Nomo to 1.6	18:14	950.341	1.1	1.76	1.75	274	228	68	79	3.5
2		18:19	954.31	1.1	1.77	1.75	273	235	65	79	3.5
3		18:24	958.36	1.0	1.6	1.6	273	239	62	80	3.5
4- 1		18:45	962.291	1.1	1.76	1.75	264	231	68	80	3.5
2		18:50	966.31	1.1	1.76	1.75	267	243	63	80	3.5
3		18:55	970.36	1.0	1.6	1.6	247	249	63	80	3.5
	End		974.362								

AIR CONSULTING & ENGINEERING, INC.

PARTICULATE LAB DATA ANALYSIS

CLIENT / SOURCE IDENTIFICATION: U.S. Sugar - Clewiston Boiler #8 Eff. Outlet

BALANCE CHECK:

1ST GROSS WEIGHT:

0.0 0.0 0.5 0.5000 10.0 10.0000 100.0 99.9998 DATE 3-29-05 TIME 1015 %RH 36 TEMP 67 BY: (INIT) CR

2ND GROSS WEIGHT:

0.0 0.0 0.5 0.5000 10.0 10.0000 100.0 99.9997 DATE 3-30-05 TIME 0910 %RH 32 TEMP 66 BY: (INIT) CR

RUN I.D.	FILTER / CONT. NO.	VOLUME (ml)	1ST GROSS WEIGHT (gm)	2ND GROSS WEIGHT (gm)	AVG. GROSS WEIGHT (gm)	TARE WEIGHT (gm)	SUB NET WEIGHT (gm)	BLANK (gm)	NET WEIGHT (mg)
1	2616	N/A	0.3506	0.3508	0.3507	0.3481	0.0026		2.6
2	2618	"	0.3502	0.3501	0.3502	0.3448	0.0054		5.4
3	2620	"	0.3527	0.3528	0.3528	0.3477	0.0051		5.1
1	1	115	98.1034	98.1036	98.1035	98.1003	0.0032		3.2
2	2	130	107.8473	107.8472	107.8473	107.8411	0.0062		6.2
3	4	140	114.5351	114.5353	114.5352	114.5280	0.0072		7.2
BLANK	44	150	106.2258	106.2257	106.2258	106.2252	0.0006		0.6

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(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

SAMPLE RECOVERY AND CHAIN OF CUSTODY

PLANT U.S. Sugar - Clewiston
SOURCE Boiler #8 Eff-Outlet
TEST DATE(S) 3-26-05

TYPE OF SAMPLE PM
SAMPLE RECOVERED BY TF/JG
PARTICULATE ANALYSIS BY CR

SAMPLE RECOVERY

RUN NUMBER	CONTAINER NUMBER	LIQUID LEVEL MARKED	COLOR	COMMENTS
1	2616	N/A	Lt Brown	
2	2618	↓	↓	
3	2620	↓	↓	
1	1	115 M/S	Clear	
2	2	130 M/S	↓	
3	4	140 M/S	↓	
ACETONE/ ~~WATER~~ BLANK	44		Clear	
FILTER BLANK				

SILICA GEL:

RUN NO.	CONT. NO.	FINAL WT. (g)	INIT. WT. (g)	NET WT. (g)	COLOR
1	99	215	200.0	15.0	Blue/Pink
2	540	215	200.0	15.0	↓
3	438	201	200.0	1.0	↓
			200.0		
			200.0		
			200.0		
			200.0		
			200.0		

APPENDIX C

HCL LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: (612)607-1700
Fax: (612)607-6444

April 21, 2005

Dagmar Fick
Ace Air Consulting & Engineering, Inc
2106 NW 67th Place
Suite 4
Gainesville, FL 32653

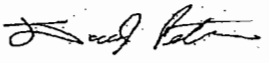
RE: Project: 1010109
Project ID: BOILER #8

Dear Dagmar Fick:

Enclosed are the analytical results for sample(s) received by the laboratory on April 04, 2005. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Daryl Peterson
Daryl.Peterson@pacelabs.com

Illinois Certification #: 200011
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

REPORT OF LABORATORY ANALYSIS
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Pace Analytical Services, Inc.
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: (612)607-1700
Fax: (612)607-6444

SAMPLE SUMMARY

Project: 1010109
Project ID: BOILER #8

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1010109001	C01 3/24 Compliance	Air	03/24/05 00:00	04/04/05 10:15
1010109002	C02 "	Air	03/24/05 00:00	04/04/05 10:15
1010109003	C03 "	Air	03/25/05 00:00	04/04/05 10:15
1010109004	C04 "	Air	03/25/05 00:00	04/04/05 10:15
1010109005	E01 3/26 outlet	Air	03/26/05 00:00	04/04/05 10:15
1010109006	E02 "	Air	03/26/05 00:00	04/04/05 10:15
1010109007	E03 "	Air	03/26/05 00:00	04/04/05 10:15
1010109008	EI1 3/26 Inlet	Air	03/26/05 00:00	04/04/05 10:15
1010109009	EI2 "	Air	03/26/05 00:00	04/04/05 10:15
1010109010	EI3 "	Air	03/26/05 00:00	04/04/05 10:15
1010109011	BLANK-H2SO4	Air	03/26/05 00:00	04/04/05 10:15
1010109012	BLANK-H2O	Air	03/26/05 00:00	04/04/05 10:15

REPORT OF LABORATORY ANALYSIS
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Pace Analytical™
www.pacelabs.com

Project Manager: Glenn Oslowski
Report Author: Michael Curtiss
Analytical Team: Michael Curtiss

Analytical Report
MCAT Laboratory Request 05-0307

EPA Method 26 by Ion Chromatography
Boiler #8
April 21, 2005

1 Introduction

Daryl Peterson from Pace Minnesota submitted twelve samples for EPA Method 26 analysis" Boiler #8" under MCAT Laboratory Request Number 05-0307. The target anion is chloride and is reported as milligrams of HCl.

2 Sample Receipt/Analytical Summary

The samples were received at the Pace Analytical MCAT Laboratory on April 5, 2005 and described as follows:

MCAT Laboratory Request Number	EPIC Number	Preservative	Sample Description
05-0307-1	1010109001	H_2SO_4	CO 1
05-0307-2	1010109002	H_2SO_4	CO 2
05-0307-3	1010109003	H_2SO_4	CO 3
05-0307-4	1010109004	H_2SO_4	CO 4
05-0307-5	1010109005	H_2SO_4	EO 1
05-0307-6	1010109006	H_2SO_4	EO 2
05-0307-7	1010109007	H_2SO_4	EO 3
05-0307-8	1010109008	H_2SO_4	EI 1
05-0307-9	1010109009	H_2SO_4	EI 2
05-0307-10	1010109010	H_2SO_4	EI 3
05-0307-11	1010109011	H_2SO_4	H_2SO_4 Blank
05-0307-12	1010109012	H_2SO_4	H_2O Blank

3 Holding Times

The Pace Analytical Method SOP MN-M-119A" has a holding time of 28 days from the time of collection. All samples were analyzed within this holding time.

4 Methods - Analytical and Preparatory

The samples were diluted and analyzed from April 14, 2005 to April 21, 2005 utilizing Pace Analytical Method SOP MN-M-119A".

The samples were prepared by diluting each sample 1:100 in 18-MΩ water. Aliquots of each of the samples were poured into autosampler vials and analyzed.

The following analytical system was used to analyze the sample replicates.

Dionex DX500 Chromatography System:
Dionex GP50 Standard bore Gradient Pump
Dionex ASRS Ultra 4mm Suppressor
Dionex CD20 Conductivity Detector
Dionex AS11A Column, 4mm
Dionex AG11A Guard Column, 4mm
Dionex AS40 Autosampler, Inert Peek Flow Path
Eluent: 18-MΩ water, 0.2-40mM KOH by EG40 Eluent Generator
Injection: 250 µL
Flow Rate: 2.0 mL/min.

5 Analysis

5.1 Calibration

5.1.1 Calibration Curve

The data was quantitated using a 7-point calibration curve for chloride run on April 13, 2005. The calibration curve for chloride was not forced through zero and had a correlation coefficient of 0.999. The quantitation limit for chloride was determined to be the lowest standard level from the calibration curve. The calibration standards were prepared from a mixed anion stock (Mix 5) purchased from Alltech Associates, Inc., (Lot # WION-13114). Standards were diluted with Milli-Q (18 MΩ) water.

5.1.2 Continuing Calibration Verifications (CCVs)

CCVs were run every 10 injections and at the end of the analytical sequence to verify consistent system operation. The average CCV recovery for chloride was 104%.

5.2 Blanks

5.2.1 Continuing Calibration Blanks (CCBs)

CCBs containing 18-MΩ water (extraction solution) were analyzed after every 10 injections and at the end of the analytical sequence to verify that the system operation was consistent.

5.2.2 Method Blanks

Method blanks containing 18-MΩ water (extraction solution) were prepared with the samples and analyzed in triplicate. Chloride was not detected in the method blanks above the limit of quantitation for the method.

5.3 Spikes

5.3.1 Method Spikes

Method spikes were analyzed in triplicate along with the samples. Vials containing 18-MΩ water were spiked with a mid-level certified second source standard containing chloride. The method spikes recoveries were 109%, 114%. One method spike replicate was not used due to suspected contamination during sample prep

5.3.2 Matrix Spikes

Matrix spikes were prepared and analyzed in duplicate with the samples. Vials containing *CO 1* (05-0307-1) were spiked with a certified second source standard containing chloride. Vials containing *CO 4* (05-0307-4) were spiked with a certified second source standard containing chloride. Matrix spike recoveries for chloride are listed in Appendix B.

5.4 Initial Calibration Verification (ICV)

An ICV containing chloride was prepared from a second source (Anion Mix A Lot # W-ION13029 and analyzed to confirm the accuracy of the calibration. The ICV was analyzed immediately after the calibration curve the recovery of chloride was 101%.

6 Data Summary

6.1 EPA Method 26 by Ion Chromatography

3126 outlet 1 outlet 2

MCAT Laboratory Request Number	05-0307-1	05-0307-2	05-0307-3	05-0307-4	05-0307-5	15-0307-6
Sample Identification	CO 1	CO 2	CO 3	CO 4	EO 1	EO 2
EPIC Number	1010109001	1010109002	1010109003	1010109004	1010109005	1010109006
Date Analyzed	14Apr2005	14Apr2005	14Apr2005	15Apr2005	15Apr2005	15Apr2005
Number of Replicates	2	2	2	2	4	2
Total Volume of Sample (L)	0.720	0.715	0.485	0.730	0.665	0.700
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	1:100	1:100	1:100	1:100	1:100	1:100
Compound	mg	mg	mg	mg	mg	mg
HCl	5.5	7.4	3.0	6.5	17	6.5

Outlet 3 3126 Inlet 1 Inlet 2 Inlet 3

MCAT Laboratory Request Number	05-0307-7	05-0307-8	05-0307-9	05-0307-10	05-0307-11	05-0307-12
Sample Identification	EO 3	EI 1	EI 2	EI 3	H_2SO_4 Blank	H_2O Blank
EPIC Number	1010109007	1010109008	1010109009	1010109010	1010109011	1010109012
Date Analyzed	15Apr2005	15Apr2005	15Apr2005	15Apr2005	15Apr2005	15Apr2005
Number of Replicates	2	2	2	2	2	2
Total Volume of Sample (L)	0.700	0.420	0.495	0.435	0.100	0.100
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	1:100	1:100	1:100	1:100	1:100	1:100
Compound	mg	mg	mg	mg	mg	mg
HCl	10	8.5	2.2	4.8	0.15	< 0.10

Observation/Discussions

None

6 Data Sample Retention

Hardcopies and electronic copies of the data are kept on file at the Pace Analytical MCAT Laboratory.

7 Attachments

7.1 Attachment A: Sample Replicate Data

7.2 Attachment B: QC Data

Attachment A:
Sample Replicate Data

MCAT Laboratory Request Number	05-0307-1	05-0307-1
Sample Identification	CO 1	CO 1
Pace Analytical Services EPIC ID	1010109001	1010109001
Date Analyzed	14Apr2005	14Apr2005
Sample Volume (L)	0.720	0.720
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	5.6	5.4

MCAT Laboratory Request Number	05-0307-2	05-0307-2
Sample Identification	CO 2	CO 2
Pace Analytical Services EPIC ID	1010109002	1010109002
Date Analyzed	14Apr2005	14Apr2005
Sample Volume (L)	0.715	0.715
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	7.3	7.4

MCAT Laboratory Request Number	05-0307-3	05-0307-3
Sample Identification	CO 3	CO 3
Pace Analytical Services EPIC ID	1010109003	1010109003
Date Analyzed	14Apr2005	14Apr2005
Sample Volume (L)	0.485	0.485
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	3.0	3.0

MCAT Laboratory Request Number	05-0307-4	05-0307-4	05-0307-4	05-0307-4
Sample Identification	CO 4	CO 4	CO 4	CO 4
Pace Analytical Services EPIC ID	1010109004	1010109004	1010109004	1010109004
Date Analyzed	15Apr2005	15Apr2005	21Apr2005	21Apr2005
Sample Volume (L)	0.730	0.730	0.730	0.730
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	100	100	100	100
Compound	mg	mg	mg	mg
HCl	5.9	6.6	7.1	6.4

Attachment A:
Sample Replicate Data

MCAT Laboratory Request Number	05-0307-5	05-0307-5
Sample Identification	EO 1	EO 1
EPIC ID	1010109005	1010109005
Date Analyzed	15Apr2005	15Apr2005
Sample Volume (L)	0.665	0.665
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	17	18

MCAT Laboratory Request Number	15-0219-6	15-0219-6
Sample Identification	EO 2	EO 2
EPIC ID	1010109006	1010109006
Date Analyzed	15Apr2005	15Apr2005
Sample Volume (L)	0.700	0.700
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	6.4	6.5

MCAT Laboratory Request Number	05-0307-7	05-0307-7
Sample Identification	EO 3	EO 3
EPIC ID	1010109007	1010109007
Date Analyzed	15Apr2005	15Apr2005
Sample Volume (L)	0.700	0.700
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	10	11

MCAT Laboratory Request Number	05-0307-8	05-0307-8
Sample Identification	EI 1	EI 1
EPIC ID	1010109008	1010109008
Date Analyzed	15Apr2005	15Apr2005
Sample Volume (L)	0.420	0.420
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	8.4	8.5

Attachment A:
Sample Replicate Data

MCAT Laboratory Request Number	05-0307-9	05-0307-9	05-0307-9	05-0307-9
Sample Identification	EI 2	EI 2	EI 2	EI 2
EPIC ID	1010109009	1010109009	1010109009	1010109009
Date Analyzed	15Apr2005	15Apr2005	15Apr2005	15Apr2005
Sample Volume (L)	0.495	0.495	0.495	0.495
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	100	100	100	100
Compound	mg	mg	mg	mg
HCl	2.6	2.1	2.2	2.2

MCAT Laboratory Request Number	05-0307-10	05-0307-10	05-0307-10	05-0307-10
Sample Identification	EI 3	EI 3	EI 3	EI 3
EPIC ID	1010109010	1010109010	1010109010	1010109010
Date Analyzed	15Apr2005	15Apr2005	20Apr2005	21Apr2005
Sample Volume (L)	0.435	0.435	0.435	0.435
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	100	100	100	100
Compound	mg	mg	mg	mg
HCl	7.3	3.7	3.2	5.2

MCAT Laboratory Request Number	05-0307-11	05-0307-11	05-0307-11	05-0307-11
Sample Identification	H_2SO_4 Blank	H_2SO_4 Blank	H_2SO_4 Blank	H_2SO_4 Blank
EPIC ID	1010109011	1010109011	1010109011	1010109011
Date Analyzed	15Apr2005	15Apr2005	20Apr2005	20Apr2005
Sample Volume (L)	0.100	0.100	0.100	0.100
Preservation	H_2SO_4	H_2SO_4	H_2SO_4	H_2SO_4
Dilution	100	100	100	100
Compound	mg	mg	mg	mg
HCl	0.21	0.13	0.12	0.14

MCAT Laboratory Request Number	05-0307-12	05-0307-12
Sample Identification	H_2O Blank	H_2O Blank
EPIC ID	1010109012	1010109012
Date Analyzed	15Apr2005	15Apr2005
Sample Volume (L)	0.100	0.100
Preservation	H_2SO_4	H_2SO_4
Dilution	100	100
Compound	mg	mg
HCl	< 0.10	< 0.10

Attachment B:
QC Data

Method Blank Data

	Method Blank	Method Blank	Method Blank
Date of Analysis	14-Apr-2005	14-Apr-2005	14-Apr-2005
Concentration Units	µg/L	µg/L	µg/L
Chloride	< 10	< 10	< 10

Method Spike Data

		Method Spike Recovery	Method Spike Recovery
Date of Analysis		14-Apr-2005	14-Apr-2005
Extraction Volume (mL)		10	10
	Amount Spiked		
Concentration Units	µg/L	Recovery	Recovery
Chloride	40	109%	114%

Matrix Spike Data

		05-0307-1 MS Recovery	05-0307-1 MSD Recovery
Date of Analysis		14-Apr-2005	14-Apr-2005
Preservation		H_2SO_4	H_2SO_4
Dilution Factor		100	100
	Amount Spiked		
Concentration Units	µg/L	Recovery	Recovery
Chloride	40	132%	133%

		05-0307-4 MS Recovery	05-0307-4 MSD Recovery
Date of Analysis		21-Apr-2005	21-Apr-2005
Preservation		H_2SO_4	H_2SO_4
Dilution Factor		100	100
	Amount Spiked		
Concentration Units	µg/L	Recovery	Recovery
Chloride	40	113%	144%

BEST AVAILABLE COPY

pwtice
14689 1010109

ACE AIR CONSULTING & ENGINEERING, INC.
2100 NW 67TH PLACE SUITE 1
GAINESVILLE, FLORIDA 32653
(352) 335-1889 - OFFICE / (352) 335-1891 - FAX

SAMPLE RECOVERY AND CHAIN OF CUSTODY

PLANT U.S. SUGAR - CLEWISTON
SOURCE BOILER #8
TEST DATE(S) 3-24-26-05
TEST TEAM CPS, JG, RH, TF

RUN NUMBER(S) All
TYPE OF SAMPLING TRAIN EPA-26A
TYPE OF SAMPLES HCL
PROJECT NO.

SAMPLE INVENTORY PAGE 1 OF 1

	SAMPLE ID	DESCRIPTION/COMPONENTS	RINSE TYPE	COLOR	NO. OF CONTAINERS	
1	RUN 1	BH FH HDR, CONN GLASS, IMP	DI H2O	CLEAR	1-720 MLS	1010109
2	COMP. 2	1, 2, 3			1-715 "	
3	Outlet 3	" " "			1-485 "	
4	4	" " "			1-730 "	
1	RUN 1	" " "			1-665 "	
2	EFF. 2	" " "			1-700 "	
3	Outlet 3	" " "			1-700 "	
1	RUN 1	" " "			1-420 "	
2	EFF. 2	" " "			1-495 "	
3	Inlet 3	" " "			1-435 "	
	BLANK	0.1N H2SO4 - 100 MLS	N/A	CLEAR	1 - 100 MLS	
	BLANK	DI H2O - 100 MLS	N/A	CLEAR	1 - 100 MLS	

TOTAL CONTAINERS SHIPPED: 12

*NOTE: ALL SILICA GEL WEIGHED AND DISCARDED.

SAMPLES COLLECTED/CHARGED BY: JG/TF
REAGENTS PREPARED BY: CR

METHOD OF SHIPMENT
FROM FIELD: VAN
FROM ACE LABORATORY: UPS

ANALYSES TO BE PERFORMED BY: PACE ANALYTICAL
RECEIVED BY: DATE: 4-4-05 TIME: 10:15
REMARKS:

04 Apr 2005 15:30

T-1090

APPENDIX D

FUEL FACTOR CALCULATION
BAGASSE ANALYSIS

AIR CONSULTING AND ENGINEERING, INC.

FUEL FACTOR CALCULATION

COMPANY NAME: United States Sugar Corporation
SOURCE: Boiler 8
FUEL FIRED: Bagasse

Run	1	2	3
	dry	dry	dry
Date	3/26/05	3/26/05	3/26/05
Time			
Carbon (%)	50.05	48.15	49.61
Hydrogen (%)	5.2	5.55	5.62
Nitrogen (%)	0.55	0.42	0.49
Sulfur (%)	0.09	0.06	0.06
Oxygen (%)	40.33	39.63	40.03
HHV (BTU/lb)	8170	7864	7962
F-Factor (scf/MMBTU)	**9435**	**9631**	**9803**

Sample Calculation - Run 1

$$Fd = \frac{K[(Khd*\%H) + (Kcd*\%C) + (Ksd*\%S) + (Knd*\%N) - (Kod*\%O)]}{GCVd}$$

$$= \frac{10E6[3.64(5.2) + 1.53(50.05) + 0.57(0.09) + 0.14(0.55) - 0.46(40.33)]}{8170}$$

$$= 9435$$

Where:

%H	Concentration of hydrogen from the ultimate fuel analysis on a wet basis (as received)
%C	Concentration of carbon from the ultimate fuel analysis on a wet basis (as received)
%S	Concentration of sulfur from the ultimate fuel analysis on a wet basis (as received)
%N	Concentration of nitrogen from the ultimate fuel analysis on a wet basis (as received)
%O	Concentration of oxigen from the ultimate fuel analysis on a wet basis (as received)
Khd	conversion factor (3.64 scf/lb-%)
Kc	conversion factor (1.53 scf/lb-%)
Ks	conversion factor (0.57 scf/lb-%)
Kn	conversion factor (0.14 scf/lb-%)
Ko	conversion factor (0.46 scf/lb-%)
K	conversion factor (10E6 BTU/MMBTU)
GCV	gross calorific heating value (BTU/lb HHV) wet

Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Date April 14 2005
HRI Project 009-555
HRI Series No. C394/05-4
Date Rec'd. 03/30/05
Cust. P.O.#

Golder Associates, Inc.
David Buff
6241 NW 23rd Street, Suite 500
Gainesville, FL 32653

Sample Identification
ISS-B8ER1 326

Reporting Basis >	As Rec'd		Dry	Air Dry
Proximate (%)				
Moisture	57.27		0.00	1.76
Ash	1.61		3.78	3.71
Volatile	36.20		84.71	83.22
Fixed C	4.92		11.51	11.31
Total	100.00		100.00	100.00
Sulfur	0.04		0.09	0.09
Btu/lb (HHV)	3491		8170	8026
MMF Btu/lb	3552		8517	
MAF Btu/lb			8490	
Air Dry Loss (%)		56.50		
Ultimate (%)				
Moisture	57.27		0.00	1.76
Carbon	21.39		50.05	49.17
Hydrogen	2.22		5.20	5.11
Nitrogen	0.23		0.55	0.54
Sulfur	0.04		0.09	0.09
Ash	1.61		3.78	3.71
Oxygen*	17.24		40.33	39.62
Total	100.00		100.00	100.00
Chlorine**	0.020		0.048	0.047

Forms of Sulfur (as S,%)

Sulfate		
Pyritic		
Organic		
Total	0.04	0.09

Water Soluble Alkalies (%)

Na2O
K2O

Lb. Alkali/MM Btu=
Lb. Ash/MM Btu= 4.62
Lb. SO2/MM Btu= 0.22
HGI= @ % Moisture
As Rec'd. Sp.Gr.=
Free Swelling Index=

Report Prepared By:

Gerard H. Cunningham
Fuels Laboratory Supervisor

* Oxygen by Difference.
** Not usually reported as part of the ultimate analysis.

Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Date April 14 2005
HRI Project 009-555
HRI Series No. C394/05-5
Date Rec'd. 03/30/05
Cust. P.O.#

Golder Associates, Inc.
David Buff
6241 NW 23rd Street, Suite 500
Gainesville, FL 32653

Sample Identification
USS-B8ER2 326

Reporting Basis >	As Rec'd		Dry	Air Dry
Proximate (%)				
Moisture	58.61		0.00	1.87
Ash	2.56		6.19	6.07
Volatile	33.98		82.08	80.55
Fixed C	4.85		11.73	11.51
Total	100.00		100.00	100.00
Sulfur	0.03		0.06	0.06
Btu/lb (HHV)	3255		7864	7717
MMF Btu/lb	3347		8426	
MAF Btu/lb			8382	
Air Dry Loss (%)		57.82		
Ultimate (%)				
Moisture	58.61		0.00	1.87
Carbon	19.93		48.15	47.25
Hydrogen	2.30		5.55	5.45
Nitrogen	0.17		0.42	0.41
Sulfur	0.03		0.06	0.06
Ash	2.56		6.19	6.07
Oxygen*	16.40		39.63	38.89
Total	100.00		100.00	100.00
Chlorine**	0.026		0.063	0.062

Forms of Sulfur (as S,%)

Sulfate		
Pyritic		
Organic	_____	_____
Total	0.03	0.06

Water Soluble Alkalies (%)

Na20	
K20	

Lb. Alkali/MM Btu=
Lb. Ash/MM Btu= 7.87
Lb. SO2/MM Btu= 0.16
HGI= @ % Moisture
As Rec'd. Sp.Gr.=
Free Swelling Index=

Report Prepared By:

Gerard H. Cunningham
Fuels Laboratory Supervisor

* Oxygen by Difference.
** Not usually reported as part of the ultimate analysis.

Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Date June 8 2005
HRI Project 009-555
HRI Series No. C394/05-6
Date Rec'd. 03/30/05
Cust. P.O.#

Golder Associates, Inc.
David Buff
6241 NW 23rd Street, Suite 500
Gainesville, FL 32653

Sample Identification
USS-B8ER3 326 Correction to report dated 04/14/05.
Volatile/Fixed C - Only changes.

Reporting Basis >	As Rec'd		Dry	Air Dry
Proximate (%)				
Moisture	58.46		0.00	2.79
Ash	1.74		4.19	4.07
Volatile	34.44		82.91	80.60
Fixed C	5.36		12.90	12.54
Total	100.00		100.00	100.00
Sulfur	0.03		0.06	0.06
Btu/lb (HHV)	3307		7962	7740
MMF Btu/lb	3370		8339	
MAF Btu/lb			8310	
Air Dry Loss (%)		57.27		
Ultimate (%)				
Moisture	58.46		0.00	2.79
Carbon	20.61		49.61	48.23
Hydrogen	2.34		5.62	5.47
Nitrogen	0.21		0.49	0.48
Sulfur	0.03		0.06	0.06
Ash	1.74		4.19	4.07
Oxygen*	16.61		40.03	38.90
Total	100.00		100.00	100.00
Chlorine**	0.021		0.050	0.049

Lb. Alkali/MM Btu=
Lb. Ash/MM Btu= 5.26
Lb. SO2/MM Btu= 0.16
HGI= 0 % Moisture
As Rec'd. Sp.Gr.=
Free Swelling Index=

Forms of Sulfur (as S,%)		
Sulfate		
Pyritic		
Organic		
Total	0.03	0.06

Report Prepared By:

Water Soluble Alkalies (%)

Na2O
K2O

Gerard H. Cunningham
Fuels Laboratory Supervisor

* Oxygen by Difference.
** Not usually reported as part of the ultimate analysis.

APPENDIX E

BOILER OPERATING PARAMETERS

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 10:44 AM thru 3/26/2005 12:06 PM

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 10:44	84.56	79.15	0.1470	134.00	364.45	341.14	0.3858	351.54	6.05
3/26 10:45	84.12	79.98	0.1437	130.87	344.39	327.43	0.3581	326.13	6.28
3/26 10:46	81.26	76.99	0.1420	128.81	320.37	303.55	0.3407	309.11	6.23
3/26 10:47	75.19	71.83	0.1313	117.89	291.03	278.03	0.3092	277.76	6.35
3/26 10:48	68.71	66.19	0.1195	106.74	302.98	291.85	0.3209	286.50	6.47
3/26 10:49	68.92	66.30	0.1223	108.65	326.01	313.60	0.3521	312.83	6.45
3/26 10:50	70.41	67.26	0.1254	111.98	320.14	305.84	0.3471	309.92	6.35
3/26 10:51	71.78	67.74	0.1265	113.45	332.90	314.14	0.3571	320.27	6.17
3/26 10:52	73.90	69.74	0.1306	117.57	323.80	305.55	0.3483	313.57	6.17
3/26 10:53	72.52	69.57	0.1295	116.41	286.89	275.21	0.3119	280.32	6.41
3/26 10:54	71.84	68.77	0.1273	114.21	300.43	287.60	0.3239	290.71	6.38
3/26 10:55	69.00	65.96	0.1200	106.18	315.30	301.42	0.3337	295.35	6.36
3/26 10:56	71.17	67.76	0.1253	110.19	333.84	317.83	0.3579	314.61	6.30
3/26 10:57	74.19	69.96	0.1367	119.21	368.07	347.09	0.4129	359.99	6.16
3/26 10:58	70.51	68.11	0.1258	111.39	313.92	303.23	0.3409	301.87	6.51
3/26 10:59	72.45	69.26	0.1247	111.78	315.71	301.81	0.3307	296.49	6.36
3/26 11:00	72.90	69.26	0.1295	117.39	340.69	323.69	0.3684	333.95	6.27
3/26 11:01	69.76	66.83	0.1209	109.46	287.07	275.00	0.3028	274.19	6.39
3/26 11:02	71.53	68.05	0.1237	112.43	292.09	277.90	0.3074	279.45	6.29
3/26 11:03	73.32	69.76	0.1248	114.36	347.40	330.52	0.3600	329.82	6.29
3/26 11:04	77.14	72.01	0.1340	121.63	340.83	318.17	0.3604	327.12	6.01
3/26 11:05	72.67	69.66	0.1287	114.66	279.90	268.32	0.3018	268.83	6.40
3/26 11:06	65.42	62.67	0.1113	99.63	289.07	276.92	0.2993	267.98	6.39
3/26 11:07	70.96	66.74	0.1255	111.97	371.91	349.77	0.4005	357.20	6.12
3/26 11:08	68.41	65.31	0.1170	104.88	342.83	327.29	0.3570	319.92	6.34
3/26 11:09	70.37	67.37	0.1250	111.44	319.23	305.60	0.3451	307.73	6.38
3/26 11:10	72.16	68.98	0.1241	111.21	306.37	292.88	0.3208	287.40	6.36
3/26 11:11	76.43	71.98	0.1317	118.67	356.87	336.08	0.3744	337.28	6.14
3/26 11:12	77.98	73.69	0.1340	120.59	310.79	293.68	0.3251	292.55	6.19
3/26 11:13	80.84	75.62	0.1421	128.19	324.22	303.27	0.3470	312.96	6.04
3/26 11:14	80.36	75.73	0.1392	125.89	343.60	323.80	0.3622	327.64	6.15
3/26 11:15	79.55	75.17	0.1375	123.66	361.67	341.75	0.3805	342.22	6.19
3/26 11:16	74.04	70.73	0.1264	114.24	309.20	295.39	0.3213	290.39	6.35

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 11:17	74.09	69.63	0.1280	115.12	350.93	329.81	0.3691	331.90	6.11
3/26 11:18	72.10	68.74	0.1268	113.57	292.81	279.15	0.3134	280.74	6.32
3/26 11:19	71.00	67.55	0.1227	109.32	328.96	312.97	0.3461	308.32	6.29
3/26 11:20	71.11	66.74	0.1257	112.10	349.50	328.03	0.3760	335.36	6.09
3/26 11:21	73.87	69.00	0.1252	112.91	371.01	346.58	0.3827	345.19	6.02
3/26 11:22	76.83	70.68	0.1329	120.50	416.58	383.22	0.4388	397.69	5.79
3/26 11:23	75.51	70.07	0.1264	115.20	367.47	340.98	0.3744	341.24	5.92
3/26 11:24	78.21	72.23	0.1344	122.15	357.81	330.47	0.3743	340.16	5.85
3/26 11:25	75.80	71.14	0.1284	115.18	301.98	283.42	0.3115	279.30	6.09
3/26 11:26	75.74	70.37	0.1293	116.23	341.64	317.43	0.3550	319.12	5.94
3/26 11:27	74.17	69.43	0.1273	113.35	315.39	295.21	0.3294	293.38	6.05
3/26 11:28	73.47	68.86	0.1291	113.34	329.66	308.99	0.3526	309.55	6.07
3/26 11:29	68.67	65.42	0.1218	107.26	319.14	304.05	0.3445	303.42	6.31
3/26 11:30	69.29	65.70	0.1210	106.02	281.61	267.01	0.2993	262.29	6.24
3/26 11:31	67.12	64.21	0.1167	103.02	305.39	292.15	0.3231	285.31	6.37
3/26 11:32	71.80	67.30	0.1241	110.20	304.69	285.58	0.3206	284.66	6.07
3/26 11:33	67.78	64.66	0.1199	105.04	275.22	262.56	0.2964	259.61	6.33
3/26 11:34	58.92	56.60	0.1011	89.97	333.28	320.15	0.3480	309.79	6.43
3/26 11:35	60.45	57.16	0.1069	93.57	348.84	329.86	0.3756	328.66	6.20
3/26 11:36	53.37	51.45	0.0921	81.27	354.06	341.29	0.3720	328.16	6.48
3/26 11:37	55.14	52.71	0.0982	86.35	381.97	365.16	0.4142	364.12	6.36
3/26 11:38	57.30	55.31	0.1003	88.04	368.92	356.11	0.3932	345.03	6.50
3/26 11:39	68.26	65.71	0.1177	103.51	335.86	323.30	0.3526	310.00	6.46
3/26 11:40	78.31	74.40	0.1372	120.97	332.32	315.74	0.3545	312.48	6.27
3/26 11:41	85.92	82.82	0.1495	129.99	316.38	304.97	0.3350	291.35	6.48
3/26 11:42	88.37	86.14	0.1600	138.74	319.17	311.11	0.3517	305.00	6.64
3/26 11:43	86.40	82.60	0.1531	132.04	345.56	330.35	0.3726	321.44	6.36
3/26 11:44	85.99	83.53	0.1542	132.10	343.26	333.43	0.3746	320.98	6.59
3/26 11:45	83.02	80.70	0.1505	128.31	345.71	336.04	0.3814	325.22	6.60
3/26 11:46	76.71	73.28	0.1391	118.79	376.82	359.99	0.4161	355.19	6.35
3/26 11:47	69.01	65.57	0.1267	107.31	346.43	329.14	0.3872	327.91	6.27
3/26 11:48	56.11	53.57	0.1026	86.32	364.17	347.66	0.4054	341.00	6.34
3/26 11:49	51.54	49.10	0.0974	79.34	403.13	384.06	0.4638	377.73	6.31
3/26 11:50	49.18	46.47	0.0910	75.28	425.79	402.34	0.4794	396.75	6.19
3/26 11:51	51.92	48.60	0.0949	79.93	519.45	486.22	0.5777	486.75	6.05
3/26 11:52	56.90	53.15	0.1045	88.21	465.43	434.78	0.5203	439.20	6.02

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 11:53	60.00	56.20	0.1084	92.81	461.49	432.26	0.5075	434.54	6.06
3/26 11:54	69.91	64.53	0.1245	108.06	464.17	428.42	0.5033	436.73	5.84
3/26 11:55	78.78	74.34	0.1389	121.12	435.19	410.67	0.4669	407.25	6.17
3/26 11:56	77.97	75.52	0.1412	121.23	379.27	367.38	0.4180	358.96	6.55
3/26 11:57	67.16	66.78	0.1205	101.88	415.54	413.16	0.4539	383.70	6.92
3/26 11:58	63.25	59.20	0.1113	95.12	527.00	493.29	0.5646	482.41	6.05
3/26 11:59	61.50	59.65	0.1071	93.31	463.49	449.58	0.4913	428.06	6.57
3/26 12:00	60.38	58.69	0.1031	91.80	431.78	419.70	0.4488	399.60	6.60
3/26 12:01	60.66	59.13	0.0993	91.12	421.84	411.19	0.4202	385.70	6.64
3/26 12:02	63.16	62.22	0.1039	95.81	400.54	394.58	0.4012	369.84	6.79
3/26 12:03	67.38	64.91	0.1129	102.11	401.68	386.93	0.4097	370.52	6.47
3/26 12:04	62.42	61.71	0.1059	94.99	426.11	421.26	0.4399	394.70	6.84
3/26 12:05	52.23	48.21	0.0895	77.94	531.90	490.93	0.5549	483.17	5.84
3/26 12:06	51.01	47.52	0.0924	77.43	533.70	497.21	0.5884	493.09	5.98
Average (all)	70.36	66.91	0.1232	109.10	356.80	339.17	0.3809	336.09	6.28
Total (all)	–	–	–	–	–	–	–	–	–
Minimum (all)	49.18	46.47	0.0895	75.28	275.22	262.56	0.2964	259.61	5.79
Maximum (all)	88.37	86.14	0.1600	138.74	533.70	497.21	0.5884	493.09	6.92
Average (valid values only)	70.36	66.91	0.1232	109.10	356.80	339.17	0.3809	336.09	6.28
Total (valid values only)	–	–	–	–	–	–	–	–	–
Count (valid values only)	83	83	83	83	83	83	83	83	83

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 10:44 AM thru 3/26/2005 12:06 PM

Timestamp	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min
3/26 10:44	13273110	392.7	911.3	484.45	50.67	53.83	54.67	0.00	0.00
3/26 10:45	13030950	390.4	910.6	484.46	48.67	54.33	55.00	0.00	0.00
3/26 10:46	13277110	392.7	907.4	483.54	52.17	55.00	55.00	0.00	0.00
3/26 10:47	13133240	393.5	898.2	479.29	47.67	54.00	54.17	0.00	0.00
3/26 10:48	13012420	389.7	892.9	476.93	50.33	54.67	55.00	0.00	0.00
3/26 10:49	13204410	395.5	888.5	474.48	51.17	54.83	54.83	0.00	0.00
3/26 10:50	13321360	394.0	892.8	476.12	51.50	54.83	54.83	0.00	0.00
3/26 10:51	13238680	391.4	896.9	477.78	51.83	54.17	54.67	0.00	0.00
3/26 10:52	13325800	393.9	900.2	479.07	51.83	48.50	54.33	0.00	0.00
3/26 10:53	13445390	392.4	898.7	478.41	50.50	53.17	55.00	0.00	0.00
3/26 10:54	13315700	393.5	897.4	478.06	50.50	55.00	54.50	0.00	0.00
3/26 10:55	12890030	385.9	885.1	471.86	49.17	54.67	54.67	0.00	0.00
3/26 10:56	12968030	388.0	879.1	468.59	46.83	54.00	54.50	0.00	0.00
3/26 10:57	13458650	392.5	871.8	464.36	47.17	53.67	54.67	0.00	0.00
3/26 10:58	13232490	390.7	885.4	471.51	48.33	54.17	55.00	0.00	0.00
3/26 10:59	12923100	386.5	896.6	477.58	52.00	50.17	54.83	0.00	0.00
3/26 11:00	13488340	398.2	906.6	483.02	51.00	51.67	55.00	0.00	0.00
3/26 11:01	13143330	393.0	905.5	482.84	48.67	48.33	54.83	0.00	0.00
3/26 11:02	13165330	393.8	909.1	484.93	50.83	54.67	53.83	0.00	0.00
3/26 11:03	13064170	385.8	916.1	488.77	52.17	52.33	54.83	0.00	0.00
3/26 11:04	13207060	395.1	907.6	484.02	46.67	55.00	55.00	0.00	0.00
3/26 11:05	13216280	385.3	890.9	475.20	43.00	49.67	54.83	0.00	0.00
3/26 11:06	12756710	386.5	895.3	477.59	48.17	54.17	54.67	0.00	0.00
3/26 11:07	13216510	390.1	891.9	475.38	50.17	54.33	55.00	0.00	0.00
3/26 11:08	12841230	383.8	896.1	477.17	49.17	53.67	55.00	0.00	0.00
3/26 11:09	13264960	391.2	891.6	474.70	47.33	54.83	55.00	0.00	0.00
3/26 11:10	12908560	380.7	895.8	476.92	48.17	52.83	54.00	0.00	0.00
3/26 11:11	13005210	383.5	900.9	479.65	52.00	53.83	54.83	0.00	0.00
3/26 11:12	12953310	386.9	899.8	478.98	48.33	53.83	54.33	0.00	0.00
3/26 11:13	13282630	386.8	901.9	479.89	50.17	54.67	54.33	0.00	0.00
3/26 11:14	13121660	387.2	904.7	481.47	49.17	46.50	54.67	0.00	0.00

Timestamp	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-mln	Heat Input Rate mmBtu/hr 1-Mln	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min
3/26 11:15	13020450	384.0	899.5	478.95	52.17	52.00	54.83	0.00	0.00
3/26 11:16	12923470	386.1	903.8	481.53	53.33	53.50	54.50	0.00	0.00
3/26 11:17	13014470	383.7	899.1	479.06	51.33	51.83	54.50	0.00	0.00
3/26 11:18	13193730	384.0	895.7	477.15	51.17	54.67	54.50	0.00	0.00
3/26 11:19	12897170	380.1	890.8	474.42	48.67	53.00	52.17	0.00	0.00
3/26 11:20	13203790	389.1	892.0	474.74	48.33	44.83	54.83	0.00	0.00
3/26 11:21	12803040	392.3	902.0	479.52	50.33	52.33	54.83	0.00	0.00
3/26 11:22	13136740	386.9	906.4	481.43	48.17	52.17	54.33	0.00	0.00
3/26 11:23	12778400	381.3	911.4	484.18	49.00	54.33	54.67	0.00	0.00
3/26 11:24	13081800	385.3	908.7	483.10	51.17	54.50	54.50	0.00	0.00
3/26 11:25	12727440	379.6	896.7	477.34	52.67	53.17	54.67	0.00	0.00
3/26 11:26	12853580	383.4	898.9	478.66	47.83	54.83	54.83	0.00	0.00
3/26 11:27	12800300	376.9	890.7	474.33	45.00	54.83	55.00	0.00	0.00
3/26 11:28	12921210	375.6	877.8	467.41	47.83	54.67	54.83	0.00	0.00
3/26 11:29	13082830	385.2	880.7	469.00	46.33	53.83	55.00	0.00	0.00
3/26 11:30	12816720	377.2	876.4	466.74	49.67	38.17	55.00	0.00	0.00
3/26 11:31	12856120	383.3	883.0	470.27	49.67	52.17	54.67	0.00	0.00
3/26 11:32	12856340	383.2	887.9	472.75	51.17	55.00	54.83	0.00	0.00
3/26 11:33	12980040	377.2	875.8	466.25	47.33	48.33	54.50	0.00	0.00
3/26 11:34	12790780	376.3	890.3	474.09	51.00	54.33	55.00	0.00	0.00
3/26 11:35	12964710	376.6	875.0	466.04	49.83	53.17	55.00	0.00	0.00
3/26 11:36	12754130	380.0	882.1	469.74	44.00	50.83	54.83	0.00	0.00
3/26 11:37	13117490	380.9	879.0	468.10	46.67	49.00	54.83	0.00	0.00
3/26 11:38	12869760	383.3	877.5	467.40	49.00	45.50	54.67	0.00	0.00
3/26 11:39	12701310	383.3	879.3	468.09	49.17	54.17	54.33	0.00	0.00
3/26 11:40	12939220	375.6	881.4	468.91	47.17	51.00	55.00	0.00	0.00
3/26 11:41	12672160	382.3	869.7	462.51	48.17	47.17	54.17	0.00	0.00
3/26 11:42	13149930	386.5	867.3	461.33	50.33	48.50	54.33	0.00	0.00
3/26 11:43	12800390	381.0	862.6	458.94	44.83	52.00	55.00	0.00	0.00
3/26 11:44	12867530	383.1	856.8	455.75	50.00	50.67	54.67	0.00	0.00
3/26 11:45	12945100	385.1	852.6	453.24	51.00	44.67	55.00	0.00	0.00
3/26 11:46	12970890	385.8	853.7	453.35	50.33	39.00	54.83	0.00	0.00
3/26 11:47	13024930	382.4	846.8	449.40	49.50	50.83	54.50	0.00	0.00
3/26 11:48	12885330	383.3	841.1	446.54	49.67	53.50	50.67	0.00	0.00
3/26 11:49	12893720	383.5	814.4	432.55	51.33	49.33	54.50	0.00	0.00

Timestamp	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min
3/26 11:50	12822080	386.5	827.6	439.47	51.33	53.00	54.50	0.00	0.00
3/26 11:51	12894450	388.8	842.5	447.21	49.83	50.17	54.50	0.00	0.00
3/26 11:52	12985330	386.5	844.2	448.06	49.67	53.67	54.50	0.00	0.00
3/26 11:53	12957020	385.7	856.3	454.78	47.33	46.17	53.33	0.00	0.00
3/26 11:54	12947180	385.7	867.8	461.16	52.33	51.83	53.50	0.00	0.00
3/26 11:55	12877250	383.6	872.2	464.18	48.67	54.17	54.67	0.00	0.00
3/26 11:56	13023750	383.2	858.7	457.90	49.83	54.17	54.83	0.00	0.00
3/26 11:57	12706300	388.9	845.3	451.68	45.00	52.00	53.83	0.00	0.00
3/26 11:58	12596450	380.5	854.4	456.29	51.67	54.83	54.83	0.00	0.00
3/26 11:59	12708720	388.9	871.3	464.83	50.50	47.00	52.83	0.00	0.00
3/26 12:00	12735160	384.8	890.4	474.56	48.67	46.33	54.33	0.00	0.00
3/26 12:01	12581660	385.3	917.8	489.03	49.17	40.00	49.67	0.00	0.00
3/26 12:02	12705910	384.0	921.9	491.58	51.33	45.83	54.83	0.00	0.00
3/26 12:03	12693320	389.1	904.4	482.04	51.67	52.50	55.00	0.00	0.00
3/26 12:04	12746510	390.8	897.2	477.99	49.17	43.33	54.67	0.00	0.00
3/26 12:05	12499860	388.3	870.8	462.99	45.00	38.50	54.67	0.00	0.00
3/26 12:06	12713640	394.9	838.0	443.97	41.00	45.50	54.67	0.00	0.00
Average (all)	12978020	386.1	884.5	470.93	49.29	51.33	54.50	0.00	0.00
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	12499860	375.6	814.4	432.55	41.00	38.17	49.67	0.00	0.00
Maximum (all)	13488340	398.2	921.9	491.58	53.33	55.00	55.00	0.00	0.00
Average (valid values only)	12978020	386.1	884.5	470.93	49.29	51.33	54.50	0.00	0.00
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	83	83	83	83	83	83	83	83	83

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 10:44 AM thru 3/26/2005 12:06 PM

Timestamp	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr
3/26 10:44	159.17	498.33	595.83	539.17	0.00	0.00	1633.33	54.8	2.63
3/26 10:45	158.00	370.00	549.17	534.17	0.00	0.00	1453.34	59.0	2.62
3/26 10:46	162.17	557.50	625.00	535.83	0.00	0.00	1718.33	60.7	2.63
3/26 10:47	155.84	328.33	542.50	515.83	0.00	0.00	1386.66	62.3	2.63
3/26 10:48	160.00	398.33	593.33	529.17	0.00	0.00	1520.83	62.3	2.62
3/26 10:49	160.83	460.83	605.00	530.00	0.00	0.00	1595.83	61.2	2.63
3/26 10:50	161.16	480.83	607.50	531.67	0.00	0.00	1620.00	61.3	2.62
3/26 10:51	160.67	490.00	586.67	530.83	0.00	0.00	1607.50	60.3	2.63
3/26 10:52	154.66	469.17	397.50	514.17	0.00	0.00	1380.84	59.1	2.63
3/26 10:53	158.67	400.83	520.00	526.67	0.00	0.00	1447.50	58.9	2.63
3/26 10:54	160.00	408.33	582.50	527.50	0.00	0.00	1518.33	60.4	2.63
3/26 10:55	158.51	374.17	589.17	528.33	0.00	0.00	1491.67	59.0	2.62
3/26 10:56	155.33	319.17	558.33	526.67	0.00	0.00	1404.17	57.3	2.62
3/26 10:57	155.51	275.00	546.67	520.83	0.00	0.00	1342.50	56.3	2.62
3/26 10:58	157.50	334.17	574.17	525.83	0.00	0.00	1434.17	59.8	2.62
3/26 10:59	157.00	484.17	462.50	525.00	0.00	0.00	1471.67	55.5	2.62
3/26 11:00	157.67	416.67	497.50	531.67	0.00	0.00	1445.84	59.1	2.63
3/26 11:01	151.83	339.17	393.33	525.00	0.00	0.00	1257.50	58.4	2.63
3/26 11:02	159.33	445.00	610.00	518.33	0.00	0.00	1573.33	57.0	2.62
3/26 11:03	159.33	524.17	533.33	529.17	0.00	0.00	1586.67	56.4	2.63
3/26 11:04	156.67	328.33	602.50	533.33	0.00	0.00	1464.16	55.3	2.62
3/26 11:05	147.50	153.33	373.33	512.50	0.00	0.00	1039.16	55.6	2.62
3/26 11:06	157.01	290.00	561.67	523.33	0.00	0.00	1375.00	56.9	2.62
3/26 11:07	159.50	360.00	557.50	526.67	0.00	0.00	1444.17	54.7	2.62
3/26 11:08	157.84	324.17	542.50	526.67	0.00	0.00	1393.34	50.9	2.63
3/26 11:09	157.16	295.83	585.83	524.17	0.00	0.00	1405.83	50.9	2.63
3/26 11:10	155.00	362.50	541.67	502.50	0.00	0.00	1406.67	49.5	2.63
3/26 11:11	160.66	497.50	579.17	530.83	0.00	0.00	1607.50	50.3	2.63
3/26 11:12	156.49	353.33	553.33	513.33	0.00	0.00	1419.99	49.7	2.63
3/26 11:13	159.17	446.67	615.83	524.17	0.00	0.00	1586.67	49.9	2.63
3/26 11:14	150.34	402.50	397.50	528.33	0.00	0.00	1328.33	53.2	2.63
3/26 11:15	159.00	513.33	535.00	539.17	0.00	0.00	1587.50	54.5	2.63

Timestamp	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr
3/26 11:16	161.33	571.67	580.83	540.00	0.00	0.00	1692.50	57.7	2.63
3/26 11:17	157.66	468.33	515.00	532.50	0.00	0.00	1515.83	54.4	2.62
3/26 11:18	160.34	445.00	610.00	523.33	0.00	0.00	1578.33	57.0	2.63
3/26 11:19	153.84	348.33	540.00	470.83	0.00	0.00	1359.16	55.9	2.62
3/26 11:20	147.99	317.50	335.83	524.17	0.00	0.00	1177.50	55.2	2.62
3/26 11:21	157.49	414.17	542.50	538.33	0.00	0.00	1495.00	56.1	2.63
3/26 11:22	154.67	275.83	494.17	530.00	0.00	0.00	1300.00	55.8	2.63
3/26 11:23	158.00	371.67	600.83	531.67	0.00	0.00	1504.17	55.8	2.63
3/26 11:24	160.17	483.33	633.33	538.33	0.00	0.00	1654.99	56.9	2.63
3/26 11:25	160.51	575.83	584.17	542.50	0.00	0.00	1702.50	55.5	2.62
3/26 11:26	157.49	325.83	610.00	532.50	0.00	0.00	1468.33	55.3	2.63
3/26 11:27	154.83	223.33	590.00	532.50	0.00	0.00	1345.83	56.3	2.63
3/26 11:28	157.33	313.33	595.83	528.33	0.00	0.00	1437.49	56.0	2.62
3/26 11:29	155.16	305.83	588.33	533.33	0.00	0.00	1427.49	54.9	2.63
3/26 11:30	142.84	385.83	156.67	524.17	0.00	0.00	1066.67	55.0	2.63
3/26 11:31	156.51	363.33	510.00	536.67	0.00	0.00	1410.00	54.4	2.64
3/26 11:32	161.00	433.33	609.17	538.33	0.00	0.00	1580.83	51.8	2.63
3/26 11:33	150.16	258.33	387.50	509.17	0.00	0.00	1155.00	49.6	2.63
3/26 11:34	160.33	359.17	549.17	526.67	0.00	0.00	1435.01	50.1	2.62
3/26 11:35	158.00	285.00	490.83	518.33	0.00	0.00	1294.16	44.9	2.63
3/26 11:36	149.66	130.83	395.00	500.00	0.00	0.00	1025.83	42.2	2.63
3/26 11:37	150.50	210.00	334.17	503.33	0.00	0.00	1047.50	32.2	2.63
3/26 11:38	149.17	275.00	276.67	505.83	0.00	0.00	1057.50	27.5	2.63
3/26 11:39	157.67	269.17	527.50	510.83	0.00	0.00	1307.50	23.2	2.63
3/26 11:40	153.17	201.67	416.67	511.67	0.00	0.00	1130.01	21.8	2.62
3/26 11:41	149.51	207.50	345.83	477.50	0.00	0.00	1030.83	23.4	2.62
3/26 11:42	153.16	267.50	339.17	512.50	0.00	0.00	1119.17	25.7	2.63
3/26 11:43	151.83	141.67	430.83	516.67	0.00	0.00	1089.17	31.6	2.62
3/26 11:44	155.34	272.50	416.67	515.83	0.00	0.00	1205.00	35.5	2.63
3/26 11:45	150.67	277.50	297.50	511.67	0.00	0.00	1086.67	40.8	2.63
3/26 11:46	144.16	268.33	162.50	503.33	0.00	0.00	934.16	45.2	2.63
3/26 11:47	154.83	260.83	400.83	523.33	0.00	0.00	1184.99	48.1	2.63
3/26 11:48	153.84	242.50	472.50	425.00	0.00	0.00	1140.00	47.2	2.62
3/26 11:49	155.16	306.67	404.17	515.83	0.00	0.00	1226.67	40.7	2.62
3/26 11:50	158.83	300.83	510.83	524.17	0.00	0.00	1335.83	37.6	2.64
3/26 11:51	154.50	271.67	395.00	512.50	0.00	0.00	1179.17	31.3	2.63

Timestamp	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr
3/26 11:52	157.84	265.00	498.33	520.00	0.00	0.00	1283.33	25.9	2.63
3/26 11:53	146.83	205.00	277.50	462.50	0.00	0.00	945.00	21.8	2.62
3/26 11:54	157.66	360.83	453.33	492.50	0.00	0.00	1306.66	21.5	2.63
3/26 11:55	157.51	255.83	500.00	524.17	0.00	0.00	1280.00	21.0	2.62
3/26 11:56	158.83	261.67	493.33	518.33	0.00	0.00	1273.33	22.4	2.63
3/26 11:57	150.83	126.67	386.67	475.83	0.00	0.00	989.17	23.7	2.63
3/26 11:58	161.33	256.67	497.50	505.83	0.00	0.00	1260.00	23.3	2.63
3/26 11:59	150.33	221.67	315.00	457.50	0.00	0.00	994.17	22.2	2.62
3/26 12:00	149.33	180.00	290.00	496.67	0.00	0.00	966.67	21.2	2.63
3/26 12:01	138.84	188.33	163.33	389.17	0.00	0.00	740.83	21.5	2.63
3/26 12:02	151.99	264.17	244.17	513.33	0.00	0.00	1021.67	22.0	2.63
3/26 12:03	159.17	260.00	408.33	524.17	0.00	0.00	1192.50	21.9	2.62
3/26 12:04	147.17	223.33	238.33	500.83	0.00	0.00	962.49	21.3	2.63
3/26 12:05	138.17	111.67	95.00	462.50	0.00	0.00	669.17	21.1	2.63
3/26 12:06	141.17	58.33	182.50	454.17	0.00	0.00	695.00	20.2	2.63
Average (all)	155.11	329.76	471.19	515.06	0.00	0.00	1316.01	45.6	2.63
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	138.17	58.33	95.00	389.17	0.00	0.00	669.17	20.2	2.62
Maximum (all)	162.17	575.83	633.33	542.50	0.00	0.00	1718.33	62.3	2.64
Average (valid values only)	155.11	329.76	471.19	515.06	0.00	0.00	1316.01	45.6	2.63
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	83	83	83	83	83	83	83	83	83

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 10:44 AM thru 3/26/2005 12:06 PM

Timestamp	Water Flow Rate 2- 1-Min kgal/hr	Water Flow 1- On (Y/N) 1-Min	Water Flow 2- On (Y/N) 1-Min	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 10:44	2.59	On	On	776.6	258.6	271.1	254.50	322.67	294.83
3/26 10:45	2.59	On	On	774.9	258.6	270.9	181.67	293.50	294.00
3/26 10:46	2.59	On	On	771.5	258.5	270.8	291.50	343.83	295.00
3/26 10:47	2.58	On	On	768.3	258.4	270.9	165.33	295.33	278.83
3/26 10:48	2.59	On	On	766.2	258.3	270.6	201.83	324.67	291.50
3/26 10:49	2.59	On	On	766.7	258.3	270.7	236.83	329.83	291.00
3/26 10:50	2.59	On	On	769.2	258.2	270.8	251.50	333.33	291.50
3/26 10:51	2.59	On	On	771.9	258.3	270.6	255.83	318.50	290.17
3/26 10:52	2.59	On	On	773.8	258.2	270.5	244.67	201.50	280.00
3/26 10:53	2.59	On	On	773.0	258.1	270.4	204.17	279.67	290.00
3/26 10:54	2.59	On	On	771.2	257.9	270.3	209.50	320.50	290.50
3/26 10:55	2.59	On	On	769.4	257.7	270.2	187.83	322.33	289.17
3/26 10:56	2.58	On	On	769.7	257.5	269.9	158.17	302.17	287.33
3/26 10:57	2.58	On	On	771.5	257.5	269.9	130.33	293.83	285.00
3/26 10:58	2.59	On	On	771.8	257.5	269.6	166.17	311.17	289.33
3/26 10:59	2.59	On	On	771.5	257.6	269.5	251.67	234.17	286.33
3/26 11:00	2.59	On	On	770.7	257.5	269.5	213.83	259.00	292.67
3/26 11:01	2.59	On	On	768.9	257.4	269.4	168.33	197.33	288.00
3/26 11:02	2.59	On	On	767.8	257.2	269.6	229.33	333.67	279.33
3/26 11:03	2.59	On	On	767.5	257.4	269.7	274.67	282.83	290.17
3/26 11:04	2.59	On	On	768.2	257.3	269.7	163.83	331.67	293.67
3/26 11:05	2.59	On	On	767.5	257.2	269.7	67.50	187.83	281.33
3/26 11:06	2.58	On	On	767.1	257.1	269.5	141.17	308.00	286.17
3/26 11:07	2.59	On	On	768.8	257.1	269.3	183.33	303.17	290.00
3/26 11:08	2.59	On	On	770.5	257.1	269.0	159.83	292.67	290.00
3/26 11:09	2.59	On	On	770.8	257.1	268.8	145.00	323.33	288.50
3/26 11:10	2.59	On	On	770.6	257.0	268.7	180.83	288.67	271.67
3/26 11:11	2.59	On	On	770.7	257.1	268.7	259.50	314.17	291.33
3/26 11:12	2.59	On	On	771.1	257.1	268.7	179.83	299.83	279.17
3/26 11:13	2.59	On	On	771.8	257.0	268.9	231.50	336.83	284.17
3/26 11:14	2.59	On	On	771.4	257.1	269.1	199.67	201.17	288.83
3/26 11:15	2.59	On	On	770.3	257.0	268.8	268.67	280.00	296.67

Timestamp	Water Flow Rate 2- 1-Min kgal/hr	Water Flow 1- On (Y/N) 1-Min	Water Flow 2- On (Y/N) 1-Min	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 11:16	2.59	On	On	768.9	257.0	268.7	305.00	312.67	295.33
3/26 11:17	2.59	On	On	768.6	257.0	268.6	241.67	274.33	290.17
3/26 11:18	2.60	On	On	768.7	256.8	268.4	229.67	332.67	284.83
3/26 11:19	2.59	On	On	769.2	256.8	268.3	175.50	288.83	249.00
3/26 11:20	2.59	On	On	770.6	256.8	268.2	157.33	166.67	287.67
3/26 11:21	2.58	On	On	773.1	256.8	268.1	210.50	284.17	295.17
3/26 11:22	2.59	On	On	774.8	256.8	267.8	134.17	261.67	287.67
3/26 11:23	2.59	On	On	774.7	256.8	267.8	189.83	326.83	290.83
3/26 11:24	2.59	On	On	773.1	256.8	267.8	251.67	345.00	293.50
3/26 11:25	2.59	On	On	770.5	256.6	267.6	303.67	315.00	295.83
3/26 11:26	2.59	On	On	769.8	256.6	267.6	159.00	334.83	292.17
3/26 11:27	2.59	On	On	769.6	256.5	267.6	103.50	323.67	293.00
3/26 11:28	2.59	On	On	769.8	256.3	267.5	153.33	326.00	290.17
3/26 11:29	2.58	On	On	769.1	256.1	267.5	146.00	316.00	293.33
3/26 11:30	2.59	On	On	768.6	255.8	267.2	195.33	60.17	287.67
3/26 11:31	2.59	On	On	768.2	255.7	267.3	184.67	268.67	293.50
3/26 11:32	2.59	On	On	768.9	255.8	267.1	223.67	335.17	293.17
3/26 11:33	2.59	On	On	768.7	255.6	267.2	126.00	198.83	277.67
3/26 11:34	2.60	On	On	768.1	255.6	267.0	185.33	298.67	290.00
3/26 11:35	2.59	On	On	767.9	255.8	266.9	142.83	262.17	284.00
3/26 11:36	2.58	On	On	767.7	255.6	266.8	59.33	207.83	274.33
3/26 11:37	2.59	On	On	767.5	255.7	266.8	104.33	168.17	276.00
3/26 11:38	2.59	On	On	767.3	255.9	266.6	135.67	127.17	276.50
3/26 11:39	2.59	On	On	768.3	255.9	266.6	134.00	278.00	277.50
3/26 11:40	2.59	On	On	769.5	256.0	266.4	96.00	217.67	281.67
3/26 11:41	2.59	On	On	770.1	256.0	266.4	101.50	178.67	259.83
3/26 11:42	2.59	On	On	769.3	256.0	266.2	137.17	170.67	278.50
3/26 11:43	2.58	On	On	769.0	256.1	266.1	64.33	225.00	284.67
3/26 11:44	2.59	On	On	769.3	256.1	266.2	138.50	216.50	282.00
3/26 11:45	2.59	On	On	770.6	256.1	265.7	142.83	148.67	281.50
3/26 11:46	2.59	On	On	772.9	256.1	265.6	137.83	84.17	275.83
3/26 11:47	2.59	On	On	774.3	256.1	265.4	134.50	205.50	285.83
3/26 11:48	2.59	On	On	773.4	256.1	265.6	121.83	253.17	221.83
3/26 11:49	2.59	On	On	772.6	255.9	265.6	158.50	213.00	281.67
3/26 11:50	2.59	On	On	773.3	255.9	265.7	156.50	274.67	285.83
3/26 11:51	2.59	On	On	774.7	256.2	265.9	137.83	204.50	278.50

Timestamp	Water Flow Rate 2- 1-Min kgal/hr	Water Flow 1- On (Y/N) 1-Min	Water Flow 2- On (Y/N) 1-Min	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 11:52	2.59	On	On	775.5	256.4	266.1	134.00	268.17	283.50
3/26 11:53	2.59	On	On	774.4	256.5	266.2	99.50	134.00	246.83
3/26 11:54	2.58	On	On	773.2	256.5	266.6	190.83	235.83	264.17
3/26 11:55	2.59	On	On	769.9	256.4	266.7	130.17	271.00	286.83
3/26 11:56	2.59	On	On	764.7	256.1	267.0	135.50	268.17	283.33
3/26 11:57	2.58	On	On	759.8	255.8	267.2	57.83	202.17	257.33
3/26 11:58	2.59	On	On	760.5	255.8	267.2	134.50	273.00	277.33
3/26 11:59	2.59	On	On	762.4	256.0	267.1	113.83	162.83	246.50
3/26 12:00	2.59	On	On	763.7	256.2	267.4	92.33	143.67	269.17
3/26 12:01	2.59	On	On	763.2	256.3	267.6	99.00	73.33	201.00
3/26 12:02	2.59	On	On	760.5	256.4	267.7	135.17	115.00	281.67
3/26 12:03	2.57	On	On	759.3	255.9	268.3	134.50	215.50	289.00
3/26 12:04	2.59	On	On	758.4	255.7	268.4	113.67	116.00	261.33
3/26 12:05	2.59	On	On	761.9	255.6	268.2	51.17	37.50	252.83
3/26 12:06	2.59	On	On	768.3	255.3	268.1	24.00	86.17	247.83
Average (all)	2.59	--	--	769.4	256.7	268.1	167.27	250.30	281.10
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	2.57	--	--	758.4	255.3	265.4	24.00	37.50	201.00
Maximum (all)	2.60	--	--	776.6	258.6	271.1	305.00	345.00	296.67
Average (valid values only)	2.59	--	--	769.4	256.7	268.1	167.27	250.30	281.10
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	83	0	0	83	83	83	83	83	83

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 10:44 AM thru 3/26/2005 12:06 PM

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 10:44	0.00	0.00	872.00	619.14	633.84	1050.46	8.18	8.43
3/26 10:45	0.00	0.00	769.17	619.43	634.13	1050.94	8.11	8.36
3/26 10:46	0.00	0.00	930.33	619.40	634.10	1038.91	8.22	8.46
3/26 10:47	0.00	0.00	739.49	618.50	633.20	1037.54	8.16	8.42
3/26 10:48	0.00	0.00	818.00	617.95	632.65	1032.41	8.18	8.43
3/26 10:49	0.00	0.00	857.66	619.09	633.79	1019.91	8.15	8.41
3/26 10:50	0.00	0.00	876.33	619.02	633.72	1040.06	8.16	8.42
3/26 10:51	0.00	0.00	864.50	620.58	635.28	1044.55	8.29	8.53
3/26 10:52	0.00	0.00	726.17	621.11	635.81	1049.80	8.17	8.42
3/26 10:53	0.00	0.00	773.84	621.47	636.17	1045.50	8.18	8.46
3/26 10:54	0.00	0.00	820.50	621.53	636.23	1035.95	8.19	8.46
3/26 10:55	0.00	0.00	799.33	624.12	638.82	1018.48	8.16	8.43
3/26 10:56	0.00	0.00	747.67	627.50	642.20	1016.78	8.15	8.43
3/26 10:57	0.00	0.00	709.16	630.01	644.71	1037.33	8.16	8.43
3/26 10:58	0.00	0.00	766.67	629.36	644.06	1059.97	8.18	8.43
3/26 10:59	0.00	0.00	772.17	629.37	644.07	1066.66	8.27	8.52
3/26 11:00	0.00	0.00	765.50	628.71	643.41	1059.02	8.10	8.34
3/26 11:01	0.00	0.00	653.66	628.57	643.27	1045.69	8.19	8.41
3/26 11:02	0.00	0.00	842.33	628.65	643.35	1032.32	8.12	8.40
3/26 11:03	0.00	0.00	847.67	626.53	641.23	1043.43	8.15	8.40
3/26 11:04	0.00	0.00	789.17	626.25	640.95	1022.53	8.07	8.33
3/26 11:05	0.00	0.00	536.66	623.73	638.43	1013.63	8.19	8.44
3/26 11:06	0.00	0.00	735.34	623.25	637.95	1020.67	8.12	8.37
3/26 11:07	0.00	0.00	776.50	623.02	637.72	1037.59	7.96	8.21
3/26 11:08	0.00	0.00	742.50	621.60	636.30	1045.88	7.93	8.18
3/26 11:09	0.00	0.00	756.83	620.64	635.34	1038.05	7.93	8.20
3/26 11:10	0.00	0.00	741.17	620.69	635.39	1037.88	7.96	8.21
3/26 11:11	0.00	0.00	865.00	619.44	634.14	1047.75	7.99	8.27
3/26 11:12	0.00	0.00	758.83	619.99	634.69	1037.66	7.98	8.26
3/26 11:13	0.00	0.00	852.50	619.43	634.13	1042.09	7.98	8.28
3/26 11:14	0.00	0.00	689.67	618.44	633.14	1041.24	7.88	8.18
3/26 11:15	0.00	0.00	845.34	617.81	632.51	1031.92	7.98	8.26

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 11:16	0.00	0.00	913.00	616.01	630.71	1037.66	7.96	8.25
3/26 11:17	0.00	0.00	806.17	616.19	630.89	1030.24	7.84	8.12
3/26 11:18	0.00	0.00	847.17	614.66	629.36	1034.68	7.84	8.14
3/26 11:19	0.00	0.00	713.33	614.68	629.38	1031.34	7.86	8.14
3/26 11:20	0.00	0.00	611.67	615.25	629.95	1033.29	7.95	8.23
3/26 11:21	0.00	0.00	789.84	616.59	631.29	1043.61	7.93	8.19
3/26 11:22	0.00	0.00	683.51	617.19	631.89	1051.42	7.85	8.14
3/26 11:23	0.00	0.00	807.49	618.69	633.39	1042.16	7.91	8.20
3/26 11:24	0.00	0.00	890.17	619.13	633.83	1044.52	7.81	8.10
3/26 11:25	0.00	0.00	914.50	622.44	637.14	1020.88	7.86	8.14
3/26 11:26	0.00	0.00	786.00	623.29	637.99	1036.89	7.78	8.09
3/26 11:27	0.00	0.00	720.17	625.30	640.00	1037.95	7.72	8.02
3/26 11:28	0.00	0.00	769.50	627.91	642.61	1024.55	7.74	8.02
3/26 11:29	0.00	0.00	755.33	627.29	641.99	1045.70	7.79	8.07
3/26 11:30	0.00	0.00	543.17	627.60	642.30	1050.23	7.76	8.05
3/26 11:31	0.00	0.00	746.84	627.49	642.19	1049.53	7.82	8.10
3/26 11:32	0.00	0.00	852.01	626.82	641.52	1053.65	7.75	8.01
3/26 11:33	0.00	0.00	602.50	626.35	641.05	1036.17	7.76	8.03
3/26 11:34	0.00	0.00	774.00	623.81	638.51	1044.39	7.70	8.03
3/26 11:35	0.00	0.00	689.00	623.22	637.92	1043.18	7.73	8.03
3/26 11:36	0.00	0.00	541.49	620.48	635.18	1042.36	7.77	8.05
3/26 11:37	0.00	0.00	548.50	617.06	631.76	1047.27	7.75	8.04
3/26 11:38	0.00	0.00	539.34	615.32	630.02	1043.90	7.74	8.03
3/26 11:39	0.00	0.00	689.50	613.60	628.30	1046.16	7.82	8.13
3/26 11:40	0.00	0.00	595.34	610.37	625.07	1053.22	7.74	8.03
3/26 11:41	0.00	0.00	540.00	608.91	623.61	1032.26	7.69	7.99
3/26 11:42	0.00	0.00	586.34	604.98	619.68	1036.15	7.79	8.08
3/26 11:43	0.00	0.00	574.00	603.57	618.27	1045.07	7.70	8.00
3/26 11:44	0.00	0.00	637.00	602.62	617.32	1042.43	7.75	8.04
3/26 11:45	0.00	0.00	573.00	602.73	617.43	1043.15	7.84	8.13
3/26 11:46	0.00	0.00	497.83	603.96	618.66	1047.52	7.74	8.00
3/26 11:47	0.00	0.00	625.83	603.71	618.41	1044.26	7.95	8.26
3/26 11:48	0.00	0.00	596.83	603.71	618.41	1053.59	7.81	8.08
3/26 11:49	0.00	0.00	653.17	608.92	623.62	1016.30	7.89	8.20
3/26 11:50	0.00	0.00	717.00	610.23	624.93	1052.18	7.95	8.25
3/26 11:51	0.00	0.00	620.83	611.65	626.35	1080.80	7.95	8.28

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 11:52	0.00	0.00	685.67	613.31	628.01	1081.79	7.92	8.19
3/26 11:53	0.00	0.00	480.33	614.95	629.65	1073.15	7.98	8.28
3/26 11:54	0.00	0.00	690.83	615.34	630.04	1078.34	7.98	8.27
3/26 11:55	0.00	0.00	688.00	614.59	629.29	1064.69	7.91	8.21
3/26 11:56	0.00	0.00	687.00	609.23	623.93	1039.09	8.01	8.31
3/26 11:57	0.00	0.00	517.33	606.92	621.62	1012.64	8.18	8.50
3/26 11:58	0.00	0.00	684.83	602.49	617.19	1051.53	7.91	8.22
3/26 11:59	0.00	0.00	523.16	593.90	608.60	1077.56	7.90	8.21
3/26 12:00	0.00	0.00	505.17	581.88	596.58	1082.35	7.96	8.26
3/26 12:01	0.00	0.00	373.33	568.02	582.72	1078.19	7.84	8.17
3/26 12:02	0.00	0.00	531.84	552.21	566.91	1060.85	7.83	8.17
3/26 12:03	0.00	0.00	639.00	540.44	555.14	999.93	7.95	8.27
3/26 12:04	0.00	0.00	491.00	524.51	539.21	988.35	8.30	8.63
3/26 12:05	0.00	0.00	341.50	516.23	530.93	961.59	8.18	8.52
3/26 12:06	0.00	0.00	358.00	509.87	524.57	975.87	8.27	8.60
Average (all)	0.00	0.00	698.67	611.57	626.27	1040.81	7.96	8.24
Total (all)	–	–	–	–	–	–	–	–
Minimum (all)	0.00	0.00	341.50	509.87	524.57	961.59	7.69	7.99
Maximum (all)	0.00	0.00	930.33	630.01	644.71	1082.35	8.30	8.63
Average (valid values only)	0.00	0.00	698.67	611.57	626.27	1040.81	7.96	8.24
Total (valid values only)	–	–	–	–	–	–	–	–
Count (valid values only)	83	83	83	83	83	83	83	83

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 2:38 PM thru 3/26/2005 4:19 PM

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 14:38	72.59	72.96	0.1483	114.35	322.80	324.43	0.4013	309.51	7.07
3/26 14:39	76.43	75.03	0.1509	118.99	363.00	356.33	0.4363	344.00	6.74
3/26 14:40	77.73	76.41	0.1526	122.43	333.35	327.69	0.3984	319.58	6.76
3/26 14:41	71.07	70.36	0.1319	110.74	342.05	338.64	0.3864	324.41	6.86
3/26 14:42	62.81	61.61	0.1071	97.22	396.48	388.93	0.4113	373.54	6.73
3/26 14:43	54.31	53.81	0.0925	84.69	367.15	363.75	0.3807	348.51	6.87
3/26 14:44	45.17	44.56	0.0743	68.21	376.05	370.98	0.3765	345.64	6.81
3/26 14:45	41.60	41.54	0.0666	62.56	422.19	421.58	0.4116	386.45	6.98
3/26 14:46	44.42	43.33	0.0709	67.68	399.47	389.66	0.3882	370.48	6.65
3/26 14:47	53.54	51.22	0.0855	82.52	423.66	405.29	0.4119	397.47	6.37
3/26 14:48	63.25	60.63	0.1025	97.13	386.28	370.30	0.3812	361.05	6.40
3/26 14:49	68.07	65.71	0.1163	104.96	398.30	384.47	0.4141	373.83	6.50
3/26 14:50	71.56	69.66	0.1270	110.20	351.68	342.32	0.3800	329.65	6.62
3/26 14:51	72.60	69.69	0.1332	111.21	432.96	415.62	0.4836	403.70	6.42
3/26 14:52	74.75	71.51	0.1444	115.85	464.31	444.18	0.5458	438.02	6.37
3/26 14:53	69.73	67.40	0.1430	108.85	452.99	437.87	0.5655	430.43	6.52
3/26 14:54	63.90	62.95	0.1274	96.34	388.55	382.77	0.4715	356.56	6.79
3/26 14:55	68.25	64.80	0.1367	105.57	448.62	425.94	0.5471	422.41	6.26
3/26 14:56	70.93	67.90	0.1343	107.04	445.66	426.63	0.5136	409.38	6.38
3/26 14:57	69.01	66.11	0.1268	103.90	432.74	414.55	0.4842	396.57	6.39
3/26 14:58	65.49	62.65	0.1119	99.42	451.32	431.75	0.4695	417.05	6.37
3/26 14:59	63.01	60.40	0.1041	95.80	454.06	435.27	0.4566	420.20	6.40
3/26 15:00	58.17	53.69	0.0962	88.70	530.56	489.69	0.5343	492.43	5.84
3/26 15:01	58.19	53.32	0.0952	88.02	515.02	471.90	0.5131	474.19	5.73
3/26 15:02	61.82	56.42	0.1005	91.85	549.71	501.71	0.5439	497.16	5.67
3/26 15:03	65.63	60.90	0.1176	100.63	587.43	545.08	0.6408	548.25	5.92
3/26 15:04	64.66	60.85	0.1160	97.74	529.77	498.56	0.5783	487.43	6.13
3/26 15:05	64.65	60.51	0.1201	98.55	560.81	524.93	0.6341	520.35	6.05
3/26 15:06	65.26	61.29	0.1193	97.69	528.90	496.74	0.5885	481.92	6.10
3/26 15:07	68.21	62.79	0.1269	104.44	607.06	558.82	0.6876	565.79	5.80
3/26 15:08	69.37	63.73	0.1250	104.39	616.36	566.25	0.6762	564.57	5.77
3/26 15:09	70.52	64.07	0.1253	106.32	675.35	613.55	0.7306	619.80	5.60
3/26 15:10	72.39	65.25	0.1323	111.80	597.50	538.60	0.6645	561.70	5.48

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 15:11	69.01	64.55	0.1244	104.61	561.49	525.22	0.6162	518.08	6.04
3/26 15:12	71.20	66.83	0.1277	107.29	487.01	457.09	0.5317	446.70	6.09
3/26 15:13	72.46	66.88	0.1318	111.16	508.76	469.57	0.5633	475.08	5.84
3/26 15:14	70.80	65.17	0.1237	105.69	651.29	599.53	0.6927	591.81	5.80
3/26 15:15	72.68	66.51	0.1301	111.45	590.19	540.07	0.6431	550.89	5.71
3/26 15:16	72.39	67.26	0.1277	110.15	612.57	569.17	0.6575	567.35	5.94
3/26 15:17	71.11	65.33	0.1248	108.11	602.42	553.45	0.6435	557.50	5.77
3/26 15:18	69.47	64.94	0.1219	105.27	565.32	528.44	0.6039	521.43	6.03
3/26 15:19	69.80	64.38	0.1238	106.52	613.45	565.82	0.6623	569.82	5.83
3/26 15:20	66.08	61.11	0.1153	100.17	609.92	564.06	0.6476	562.79	5.87
3/26 15:21	64.79	59.64	0.1152	99.63	587.47	540.78	0.6360	549.88	5.80
3/26 15:22	67.49	61.15	0.1167	101.02	599.38	543.11	0.6307	546.11	5.56
3/26 15:23	66.79	59.66	0.1177	101.85	677.82	605.51	0.7273	629.17	5.34
3/26 15:24	65.86	59.52	0.1154	99.72	623.74	563.72	0.6655	574.84	5.52
3/26 15:25	68.75	62.58	0.1204	104.05	598.73	545.01	0.6383	551.56	5.63
3/26 15:26	70.95	64.71	0.1250	108.30	629.28	573.95	0.6748	584.66	5.66
3/26 15:27	70.86	64.08	0.1243	108.39	670.59	606.45	0.7159	624.36	5.53
3/26 15:28	70.70	63.98	0.1246	108.71	668.21	604.70	0.7169	625.40	5.54
3/26 15:29	71.21	64.02	0.1268	110.71	679.63	611.05	0.7367	643.18	5.44
3/26 15:30	70.48	64.28	0.1251	109.31	629.84	574.46	0.6806	594.62	5.66
3/26 15:31	71.67	65.63	0.1275	110.75	614.75	562.91	0.6657	578.21	5.72
3/26 15:32	70.00	64.95	0.1221	106.13	609.30	565.37	0.6471	562.28	5.92
3/26 15:33	68.70	62.50	0.1182	104.61	646.59	588.19	0.6771	599.29	5.62
3/26 15:34	69.69	62.50	0.1185	106.10	667.61	598.70	0.6909	618.68	5.40
3/26 15:35	70.89	62.72	0.1180	107.40	699.94	619.30	0.7094	645.46	5.19
3/26 15:36	71.25	63.20	0.1162	107.11	729.79	647.36	0.7244	667.82	5.23
3/26 15:37	71.62	64.10	0.1171	108.81	676.01	605.06	0.6730	625.18	5.37
3/26 15:38	71.03	64.28	0.1176	109.19	665.49	602.23	0.6706	622.68	5.54
3/26 15:39	70.50	64.05	0.1163	108.20	655.55	595.57	0.6585	612.40	5.60
3/26 15:40	69.76	63.79	0.1165	107.16	613.02	560.59	0.6231	573.18	5.70
3/26 15:41	67.82	61.45	0.1124	103.39	647.62	586.83	0.6533	600.93	5.56
3/26 15:42	66.30	60.43	0.1116	102.06	631.19	575.31	0.6468	591.40	5.65
3/26 15:43	65.30	59.29	0.1077	98.81	684.25	621.23	0.6868	630.24	5.59
3/26 15:44	66.08	59.49	0.1107	100.68	711.94	640.93	0.7263	660.28	5.46
3/26 15:45	64.96	58.63	0.1087	99.23	742.06	669.78	0.7561	689.97	5.50
3/26 15:46	68.02	60.38	0.1138	104.14	790.35	701.52	0.8045	736.52	5.24

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 15:47	69.15	61.77	0.1186	108.46	765.25	683.61	0.7991	730.60	5.34
3/26 15:48	68.79	61.97	0.1179	107.38	764.89	689.05	0.7977	726.77	5.47
3/26 15:49	67.81	61.44	0.1126	101.99	761.60	690.11	0.7699	697.24	5.56
3/26 15:50	67.97	61.75	0.1156	104.16	702.64	638.35	0.7275	655.42	5.60
3/26 15:51	67.23	61.24	0.1145	102.51	690.88	629.31	0.7160	641.23	5.64
3/26 15:52	66.92	60.56	0.1140	101.98	698.99	632.55	0.7247	648.41	5.54
3/26 15:53	67.28	58.78	0.1113	101.18	855.67	747.57	0.8616	783.31	4.99
3/26 15:54	65.47	57.13	0.1099	100.64	994.25	867.55	1.0161	930.28	4.97
3/26 15:55	66.22	59.08	0.1143	104.00	908.89	810.88	0.9548	868.91	5.32
3/26 15:56	66.03	59.95	0.1126	102.75	738.44	670.43	0.7664	698.45	5.59
3/26 15:57	65.95	59.64	0.1094	100.40	779.10	704.59	0.7864	721.93	5.53
3/26 15:58	66.82	59.31	0.1129	102.72	831.48	738.03	0.8553	778.06	5.24
3/26 15:59	63.81	56.75	0.1083	98.46	842.09	748.88	0.8701	790.89	5.27
3/26 16:00	59.42	52.51	0.1013	90.84	950.33	839.77	0.9861	884.36	5.17
3/26 16:01	58.12	52.49	0.1014	90.07	974.20	879.88	1.0350	918.99	5.51
3/26 16:02	57.27	51.73	0.0981	87.73	956.53	863.92	0.9975	891.94	5.51
3/26 16:03	57.27	50.87	0.0968	86.25	957.19	850.16	0.9852	877.45	5.25
3/26 16:04	57.80	50.69	0.1005	88.92	976.62	856.47	1.0338	914.54	5.05
3/26 16:05	57.10	49.42	0.1016	88.62	1091.41	944.62	1.1819	1031.06	4.84
3/26 16:06	58.25	50.57	0.1032	88.28	1002.26	870.17	1.0808	924.54	4.89
3/26 16:07	60.82	53.07	0.1074	95.12	1048.27	914.69	1.1272	997.88	4.97
3/26 16:08	61.73	55.36	0.1064	94.57	840.23	753.50	0.8814	783.50	5.40
3/26 16:09	60.75	53.96	0.1067	94.30	977.89	868.54	1.0451	923.95	5.25
3/26 16:10	60.73	54.22	0.1061	94.38	916.07	817.81	0.9744	866.53	5.33
3/26 16:11	58.87	52.02	0.0985	88.77	1009.98	892.48	1.0288	927.05	5.17
3/26 16:12	59.73	52.85	0.1014	91.92	956.21	846.04	0.9878	895.73	5.19
3/26 16:13	60.92	53.46	0.1029	94.09	990.70	869.36	1.0189	931.41	5.06
3/26 16:14	64.74	57.50	0.1107	101.37	943.47	837.97	0.9823	899.19	5.25
3/26 16:15	67.59	60.65	0.1195	106.20	724.45	650.09	0.7795	692.84	5.41
3/26 16:16	67.48	61.35	0.1209	105.18	644.61	586.01	0.7032	611.57	5.61
3/26 16:17	78.58	70.61	0.1370	123.55	660.00	593.02	0.7005	631.64	5.43
3/26 16:18	98.83	86.34	0.1666	155.41	741.91	648.18	0.7613	710.14	4.99
3/26 16:19	109.28	97.25	0.1743	170.54	614.70	547.01	0.5969	583.93	5.28

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
Average (all)	66.87	61.41	0.1168	102.49	651.14	592.82	0.6876	607.48	5.75
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	41.60	41.54	0.0666	62.56	322.80	324.43	0.3765	309.51	4.84
Maximum (all)	109.28	97.25	0.1743	170.54	1091.41	944.62	1.1819	1031.06	7.07
Average (valid values only)	66.87	61.41	0.1168	102.49	651.14	592.82	0.6876	607.48	5.75
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	102	102	102	102	102	102	102	102	102

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 2:38 PM thru 3/26/2005 4:19 PM

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min
3/26 14:38	22.35	13194290	388.0	771.2	1175.946	406.58	52.67	54.17	54.33
3/26 14:39	22.55	13040480	388.6	788.4	1174.247	416.28	52.00	54.50	54.50
3/26 14:40	22.34	13192360	388.2	802.1	1171.876	424.34	53.00	53.67	54.83
3/26 14:41	22.45	13051040	389.3	839.5	1168.463	445.43	53.33	55.00	55.00
3/26 14:42	22.59	12964560	386.9	908.1	1163.762	483.80	51.50	54.17	50.83
3/26 14:43	21.98	13062240	385.1	915.5	1157.567	490.37	52.00	50.17	54.83
3/26 14:44	23.35	12648100	378.1	918.0	1154.844	492.87	52.17	54.50	54.67
3/26 14:45	23.64	12595930	381.8	938.8	1154.085	504.33	51.00	54.83	55.00
3/26 14:46	23.01	12762240	381.7	954.3	1155.507	512.06	50.00	54.50	54.67
3/26 14:47	23.55	12910080	391.0	965.0	1158.942	516.25	52.50	53.50	54.83
3/26 14:48	22.81	12862100	384.2	947.2	1163.555	504.74	51.00	54.67	54.50
3/26 14:49	23.23	12915330	385.5	902.7	1167.098	479.55	51.83	55.00	54.83
3/26 14:50	22.66	12898600	384.6	867.5	1169.976	459.70	51.33	54.67	55.00
3/26 14:51	22.74	12830760	382.3	834.7	1172.629	441.35	49.83	43.67	54.83
3/26 14:52	22.61	12981730	386.2	802.5	1175.587	423.26	50.00	52.17	54.83
3/26 14:53	22.09	13075270	383.6	761.2	1176.936	401.00	50.50	54.67	55.00
3/26 14:54	24.45	12627880	384.9	756.3	1176.637	398.52	48.50	51.83	54.67
3/26 14:55	22.52	12956730	384.3	772.1	1176.607	406.85	47.67	49.33	54.83
3/26 14:56	23.35	12640400	374.8	797.1	1176.165	420.17	50.17	54.33	54.67
3/26 14:57	23.16	12610370	374.0	819.1	1174.603	432.33	51.50	54.17	55.00
3/26 14:58	23.23	12715940	377.3	888.2	1172.080	469.81	51.17	54.33	54.83
3/26 14:59	23.44	12734670	378.2	920.3	1166.533	489.13	49.50	54.17	54.50
3/26 15:00	22.43	12771830	375.0	921.6	1162.055	491.71	49.67	54.17	55.00
3/26 15:01	23.73	12669830	382.3	924.2	1162.716	492.81	50.67	54.33	54.50
3/26 15:02	23.63	12445340	375.6	914.1	1165.006	486.45	52.17	54.67	54.67
3/26 15:03	21.96	12843020	377.5	855.6	1168.289	454.07	49.83	54.33	54.83
3/26 15:04	23.82	12660990	381.6	842.9	1171.881	445.97	53.50	54.17	54.83
3/26 15:05	22.48	12767990	379.5	820.6	1174.011	433.36	51.00	54.67	55.00
3/26 15:06	24.26	12538400	377.3	818.9	1176.132	431.68	53.00	53.00	54.83
3/26 15:07	23.97	12825230	385.8	822.8	1178.034	433.06	52.33	51.83	54.83
3/26 15:08	24.26	12604370	378.9	834.9	1178.485	439.26	49.67	54.17	53.17

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min
3/26 15:09	24.46	12628820	384.8	848.3	1177.976	446.49	48.33	43.33	55.00
3/26 15:10	22.26	12936310	379.0	845.3	1176.655	445.41	51.33	53.00	54.67
3/26 15:11	23.34	12696840	376.8	840.8	1173.455	444.22	48.33	54.00	54.67
3/26 15:12	24.14	12621720	379.6	840.1	1170.166	445.13	47.17	53.33	54.83
3/26 15:13	22.77	12849670	381.4	843.4	1168.689	447.41	46.83	54.33	51.00
3/26 15:14	24.14	12504070	376.0	854.4	1168.960	453.15	47.67	51.50	55.00
3/26 15:15	22.07	12844380	376.4	856.6	1169.514	454.11	48.33	52.33	54.83
3/26 15:16	23.74	12744790	383.5	862.9	1169.273	457.56	51.50	54.33	54.50
3/26 15:17	22.36	12734620	373.2	866.3	1168.379	459.68	46.83	54.83	54.67
3/26 15:18	23.71	12692390	381.8	863.4	1167.174	458.65	45.67	53.50	54.83
3/26 15:19	22.81	12781970	379.5	860.4	1166.754	457.21	50.00	54.33	54.50
3/26 15:20	23.68	12697380	381.9	869.0	1166.791	461.74	48.50	54.67	54.67
3/26 15:21	22.93	12880160	382.5	864.6	1167.202	459.24	53.33	54.50	54.67
3/26 15:22	24.28	12537690	377.2	865.9	1168.376	459.48	49.83	45.83	54.50
3/26 15:23	23.22	12773030	379.3	865.1	1169.374	458.70	48.17	49.17	54.50
3/26 15:24	24.46	12681900	386.7	863.8	1169.617	457.90	51.50	54.00	55.00
3/26 15:25	23.80	12676540	381.3	864.1	1169.213	458.20	52.00	53.83	55.00
3/26 15:26	23.50	12784900	384.7	866.4	1168.327	459.77	49.67	54.50	55.00
3/26 15:27	23.69	12812050	385.5	872.1	1167.813	462.98	51.00	54.50	54.67
3/26 15:28	23.29	12879210	382.5	872.4	1167.592	463.23	49.83	54.00	54.83
3/26 15:29	22.43	13022700	381.8	873.0	1167.748	463.51	48.33	52.83	54.67
3/26 15:30	22.97	12991230	385.8	873.7	1167.180	464.10	48.67	53.00	54.50
3/26 15:31	22.55	12942770	384.4	868.6	1166.285	461.75	50.17	54.17	54.83
3/26 15:32	23.65	12698870	382.2	868.9	1165.157	462.34	52.00	54.67	55.00
3/26 15:33	24.02	12754000	383.9	885.1	1165.192	470.96	49.00	53.17	55.00
3/26 15:34	23.33	12752090	378.8	895.5	1165.929	476.22	44.00	54.00	54.83
3/26 15:35	23.70	12689680	382.0	909.9	1167.199	483.35	48.50	50.17	54.50
3/26 15:36	24.28	12592340	379.1	921.9	1167.509	489.57	48.33	54.17	54.83
3/26 15:37	23.46	12726080	383.3	928.9	1166.608	493.65	51.17	46.83	54.33
3/26 15:38	22.92	12875610	382.7	928.5	1164.644	494.29	48.67	48.33	55.00
3/26 15:39	22.68	12854880	382.2	930.0	1162.872	495.85	51.17	53.83	54.50
3/26 15:40	23.33	12866280	382.5	919.9	1162.321	490.71	50.67	54.83	54.83
3/26 15:41	23.56	12768700	384.5	919.8	1163.575	490.10	50.17	48.33	55.00
3/26 15:42	23.54	12893320	388.1	914.4	1165.680	486.36	48.00	53.33	55.00
3/26 15:43	24.15	12674520	381.4	917.7	1167.681	487.29	47.50	50.00	54.83

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min
3/26 15:44	23.63	12762290	384.0	909.1	1169.377	481.99	43.33	54.67	54.50
3/26 15:45	23.09	12794660	379.9	912.5	1170.559	483.29	45.17	43.50	54.83
3/26 15:46	23.28	12823440	380.7	915.5	1171.749	484.39	47.33	48.50	54.33
3/26 15:47	22.47	13137580	390.0	914.3	1171.888	483.72	44.67	51.50	54.67
3/26 15:48	22.49	13074890	388.2	911.1	1171.046	482.36	46.67	54.17	54.67
3/26 15:49	23.56	12597930	378.9	905.6	1169.793	480.00	51.00	54.33	54.17
3/26 15:50	23.21	12836020	381.0	900.9	1169.095	477.77	52.00	54.67	55.00
3/26 15:51	23.94	12771840	384.2	895.6	1168.918	475.03	47.00	54.67	54.83
3/26 15:52	23.29	12764910	378.8	894.7	1169.261	474.39	47.83	41.83	47.17
3/26 15:53	24.65	12597060	383.8	909.1	1171.002	481.31	39.83	49.50	52.50
3/26 15:54	23.34	12875260	382.1	915.5	1172.163	484.22	42.17	44.50	54.83
3/26 15:55	22.37	13155430	385.5	910.0	1171.559	481.60	47.00	50.50	54.67
3/26 15:56	23.08	13034210	387.0	912.6	1169.205	483.95	48.83	51.83	54.67
3/26 15:57	24.41	12751010	383.5	918.0	1167.090	487.68	47.00	51.50	53.50
3/26 15:58	23.66	12876640	387.4	909.7	1166.747	483.40	42.67	54.17	55.00
3/26 15:59	23.72	12923980	388.8	909.0	1167.466	482.74	50.50	50.00	55.00
3/26 16:00	23.02	12805420	380.3	896.8	1168.511	475.81	46.50	48.17	54.33
3/26 16:01	22.69	12980840	385.4	887.9	1168.758	470.99	48.00	50.83	54.67
3/26 16:02	23.59	12831500	385.9	894.2	1168.622	474.41	46.50	48.83	54.67
3/26 16:03	24.19	12614280	379.3	890.6	1168.857	472.42	45.17	47.00	54.33
3/26 16:04	23.96	12885980	387.5	884.6	1170.022	468.78	47.50	54.50	54.33
3/26 16:05	22.93	12999770	386.0	872.4	1171.588	461.65	47.17	54.83	54.83
3/26 16:06	24.74	12693590	387.0	855.4	1172.988	452.16	45.67	42.17	54.50
3/26 16:07	22.33	13099170	384.1	885.3	1173.441	467.74	51.50	52.00	54.67
3/26 16:08	24.26	12831600	386.1	888.9	1170.233	470.95	48.33	49.50	55.00
3/26 16:09	23.24	13001710	386.3	884.1	1166.915	469.72	47.83	45.17	53.17
3/26 16:10	23.83	13016590	391.9	889.3	1164.207	473.60	44.83	46.00	54.33
3/26 16:11	24.37	12630790	380.5	901.1	1163.055	480.36	51.00	51.17	55.00
3/26 16:12	23.51	12890380	388.5	906.8	1162.675	483.54	49.17	48.17	50.33
3/26 16:13	23.91	12937230	390.0	914.1	1162.844	487.39	44.83	42.17	51.17
3/26 16:14	22.86	13114850	390.3	915.4	1162.251	488.32	46.67	51.33	54.50
3/26 16:15	22.92	13160310	391.8	888.8	1161.020	474.61	47.83	53.83	54.83
3/26 16:16	23.53	13055260	393.8	869.7	1160.482	464.62	45.17	52.00	55.00
3/26 16:17	23.20	13169490	392.1	901.7	1161.492	481.34	51.33	47.67	54.50
3/26 16:18	22.85	13171350	392.2	932.8	1162.756	497.37	49.50	50.50	54.83

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Stack Flow kacf/min 1-min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min
3/26 16:19	22.73	13071880	389.4	978.2	1162.069	521.90	49.67	54.50	54.50
Average (all)	23.30	12833320	383.3	880.9	1168.205	467.58	49.06	51.89	54.45
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	21.96	12445340	373.2	756.3	1154.085	398.52	39.83	41.83	47.17
Maximum (all)	24.74	13194290	393.8	978.2	1178.485	521.90	53.50	55.00	55.00
Average (valid values only)	23.30	12833320	383.3	880.9	1168.205	467.58	49.06	51.89	54.45
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	102	102	102	102	102	102	102	102	102

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 2:38 PM thru 3/26/2005 4:19 PM

Timestamp	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min
3/26 14:38	0.00	0.00	161.17	283.33	416.67	490.00	0.00	0.00	1190.00
3/26 14:39	0.00	0.00	161.00	266.67	453.33	490.83	0.00	0.00	1210.83
3/26 14:40	0.00	0.00	161.50	320.83	445.83	498.33	0.00	0.00	1264.99
3/26 14:41	0.00	0.00	163.33	345.83	475.83	500.00	0.00	0.00	1321.66
3/26 14:42	0.00	0.00	156.50	265.00	440.00	410.83	0.00	0.00	1115.83
3/26 14:43	0.00	0.00	157.00	265.83	340.00	489.17	0.00	0.00	1095.00
3/26 14:44	0.00	0.00	161.34	280.83	456.67	499.17	0.00	0.00	1236.67
3/26 14:45	0.00	0.00	160.83	274.17	464.17	507.50	0.00	0.00	1245.84
3/26 14:46	0.00	0.00	159.17	239.17	437.50	495.83	0.00	0.00	1172.50
3/26 14:47	0.00	0.00	160.83	300.00	427.50	495.00	0.00	0.00	1222.50
3/26 14:48	0.00	0.00	160.17	267.50	452.50	491.67	0.00	0.00	1211.67
3/26 14:49	0.00	0.00	161.66	300.00	487.50	501.67	0.00	0.00	1289.17
3/26 14:50	0.00	0.00	161.00	288.33	460.00	494.17	0.00	0.00	1242.50
3/26 14:51	0.00	0.00	148.33	239.17	196.67	465.00	0.00	0.00	900.84
3/26 14:52	0.00	0.00	157.00	234.17	351.67	490.83	0.00	0.00	1076.67
3/26 14:53	0.00	0.00	160.17	240.83	445.83	500.00	0.00	0.00	1186.66
3/26 14:54	0.00	0.00	155.00	207.50	365.83	482.50	0.00	0.00	1055.83
3/26 14:55	0.00	0.00	151.83	183.33	291.67	470.00	0.00	0.00	945.00
3/26 14:56	0.00	0.00	159.17	230.00	442.50	493.33	0.00	0.00	1165.83
3/26 14:57	0.00	0.00	160.67	268.33	445.00	488.33	0.00	0.00	1201.66
3/26 14:58	0.00	0.00	160.33	267.50	471.67	497.50	0.00	0.00	1236.67
3/26 14:59	0.00	0.00	158.17	221.67	442.50	489.17	0.00	0.00	1153.34
3/26 15:00	0.00	0.00	158.84	195.00	404.17	487.50	0.00	0.00	1086.67
3/26 15:01	0.00	0.00	159.50	217.50	444.17	490.00	0.00	0.00	1151.67
3/26 15:02	0.00	0.00	161.51	279.17	465.83	495.83	0.00	0.00	1240.83
3/26 15:03	0.00	0.00	158.99	225.00	443.33	501.67	0.00	0.00	1170.00
3/26 15:04	0.00	0.00	162.50	317.50	461.67	492.50	0.00	0.00	1271.67
3/26 15:05	0.00	0.00	160.67	245.00	466.67	495.00	0.00	0.00	1206.67
3/26 15:06	0.00	0.00	160.83	313.33	430.83	495.00	0.00	0.00	1239.16
3/26 15:07	0.00	0.00	158.99	289.17	418.33	490.83	0.00	0.00	1198.33
3/26 15:08	0.00	0.00	157.01	221.67	431.67	449.17	0.00	0.00	1102.51
3/26 15:09	0.00	0.00	146.66	184.17	195.00	460.00	0.00	0.00	839.17

Timestamp	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min
3/26 15:10	0.00	0.00	159.00	265.83	414.17	492.50	0.00	0.00	1172.50
3/26 15:11	0.00	0.00	157.00	210.00	455.00	496.67	0.00	0.00	1161.67
3/26 15:12	0.00	0.00	155.33	152.50	383.33	479.17	0.00	0.00	1015.00
3/26 15:13	0.00	0.00	152.16	145.00	433.33	397.50	0.00	0.00	975.83
3/26 15:14	0.00	0.00	154.17	180.00	361.67	482.50	0.00	0.00	1024.17
3/26 15:15	0.00	0.00	155.49	173.33	376.67	480.00	0.00	0.00	1030.00
3/26 15:16	0.00	0.00	160.33	239.17	455.00	495.00	0.00	0.00	1189.17
3/26 15:17	0.00	0.00	156.33	169.17	456.67	499.17	0.00	0.00	1125.01
3/26 15:18	0.00	0.00	154.00	144.17	382.50	474.17	0.00	0.00	1000.84
3/26 15:19	0.00	0.00	158.83	197.50	450.83	490.83	0.00	0.00	1139.16
3/26 15:20	0.00	0.00	157.84	157.50	423.33	481.67	0.00	0.00	1062.50
3/26 15:21	0.00	0.00	162.50	290.00	465.00	494.17	0.00	0.00	1249.17
3/26 15:22	0.00	0.00	150.16	189.17	235.83	468.33	0.00	0.00	893.33
3/26 15:23	0.00	0.00	151.84	160.83	290.00	480.00	0.00	0.00	930.83
3/26 15:24	0.00	0.00	160.50	230.00	435.00	495.83	0.00	0.00	1160.83
3/26 15:25	0.00	0.00	160.83	293.33	443.33	500.83	0.00	0.00	1237.49
3/26 15:26	0.00	0.00	159.17	220.83	452.50	497.50	0.00	0.00	1170.83
3/26 15:27	0.00	0.00	160.17	255.83	462.50	498.33	0.00	0.00	1216.66
3/26 15:28	0.00	0.00	158.66	208.33	420.00	493.33	0.00	0.00	1121.66
3/26 15:29	0.00	0.00	155.83	192.50	380.00	479.17	0.00	0.00	1051.67
3/26 15:30	0.00	0.00	156.17	177.50	383.33	480.83	0.00	0.00	1041.66
3/26 15:31	0.00	0.00	159.17	240.83	428.33	491.67	0.00	0.00	1160.83
3/26 15:32	0.00	0.00	161.67	266.67	464.17	503.33	0.00	0.00	1234.17
3/26 15:33	0.00	0.00	157.17	179.17	397.50	491.67	0.00	0.00	1068.34
3/26 15:34	0.00	0.00	152.83	105.00	384.17	478.33	0.00	0.00	967.50
3/26 15:35	0.00	0.00	153.17	160.83	304.17	460.83	0.00	0.00	925.83
3/26 15:36	0.00	0.00	157.33	164.17	401.67	473.33	0.00	0.00	1039.17
3/26 15:37	0.00	0.00	152.33	235.83	258.33	471.67	0.00	0.00	965.83
3/26 15:38	0.00	0.00	152.00	188.33	268.33	472.50	0.00	0.00	929.16
3/26 15:39	0.00	0.00	159.50	247.50	443.33	487.50	0.00	0.00	1178.33
3/26 15:40	0.00	0.00	160.33	224.17	475.83	494.17	0.00	0.00	1194.17
3/26 15:41	0.00	0.00	153.50	222.50	331.67	480.83	0.00	0.00	1035.00
3/26 15:42	0.00	0.00	156.33	178.33	395.83	480.83	0.00	0.00	1054.99
3/26 15:43	0.00	0.00	152.33	155.83	291.67	465.00	0.00	0.00	912.50
3/26 15:44	0.00	0.00	152.50	97.50	391.67	465.00	0.00	0.00	954.17
3/26 15:45	0.00	0.00	143.50	96.67	150.00	444.17	0.00	0.00	690.84

Timestamp	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min
3/26 15:46	0.00	0.00	150.16	136.67	244.17	468.33	0.00	0.00	849.17
3/26 15:47	0.00	0.00	150.84	121.67	315.83	487.50	0.00	0.00	925.00
3/26 15:48	0.00	0.00	155.51	144.17	395.00	489.17	0.00	0.00	1028.34
3/26 15:49	0.00	0.00	159.50	223.33	450.00	485.00	0.00	0.00	1158.33
3/26 15:50	0.00	0.00	161.67	246.67	450.83	505.00	0.00	0.00	1202.50
3/26 15:51	0.00	0.00	156.50	145.00	417.50	489.17	0.00	0.00	1051.67
3/26 15:52	0.00	0.00	136.83	170.00	154.17	295.83	0.00	0.00	620.00
3/26 15:53	0.00	0.00	141.83	55.00	215.83	385.83	0.00	0.00	656.66
3/26 15:54	0.00	0.00	141.50	67.50	140.83	426.67	0.00	0.00	635.00
3/26 15:55	0.00	0.00	152.17	137.50	299.17	466.67	0.00	0.00	903.34
3/26 15:56	0.00	0.00	155.33	181.67	346.67	474.17	0.00	0.00	1002.51
3/26 15:57	0.00	0.00	152.00	128.33	314.17	456.67	0.00	0.00	899.17
3/26 15:58	0.00	0.00	151.84	77.50	326.67	458.33	0.00	0.00	862.50
3/26 15:59	0.00	0.00	155.50	196.67	340.00	470.00	0.00	0.00	1006.67
3/26 16:00	0.00	0.00	149.00	116.67	232.50	445.00	0.00	0.00	794.17
3/26 16:01	0.00	0.00	153.50	135.83	266.67	464.17	0.00	0.00	866.67
3/26 16:02	0.00	0.00	150.00	106.67	223.33	437.50	0.00	0.00	767.50
3/26 16:03	0.00	0.00	146.50	104.17	202.50	422.50	0.00	0.00	729.17
3/26 16:04	0.00	0.00	156.33	110.00	342.50	452.50	0.00	0.00	905.00
3/26 16:05	0.00	0.00	156.83	122.50	375.00	467.50	0.00	0.00	965.00
3/26 16:06	0.00	0.00	142.34	96.67	126.67	412.50	0.00	0.00	635.84
3/26 16:07	0.00	0.00	158.17	185.83	303.33	447.50	0.00	0.00	936.66
3/26 16:08	0.00	0.00	152.83	97.50	253.33	453.33	0.00	0.00	804.16
3/26 16:09	0.00	0.00	146.17	109.17	169.17	392.50	0.00	0.00	670.84
3/26 16:10	0.00	0.00	145.16	95.00	179.17	409.17	0.00	0.00	683.34
3/26 16:11	0.00	0.00	157.17	185.83	296.67	453.33	0.00	0.00	935.83
3/26 16:12	0.00	0.00	147.67	160.83	250.00	351.67	0.00	0.00	762.50
3/26 16:13	0.00	0.00	138.17	98.33	132.50	341.67	0.00	0.00	572.50
3/26 16:14	0.00	0.00	152.50	125.00	309.17	460.83	0.00	0.00	895.00
3/26 16:15	0.00	0.00	156.49	127.50	342.50	462.50	0.00	0.00	932.50
3/26 16:16	0.00	0.00	152.17	115.83	298.33	471.67	0.00	0.00	885.83
3/26 16:17	0.00	0.00	153.50	240.83	283.33	477.50	0.00	0.00	1001.66
3/26 16:18	0.00	0.00	154.83	225.00	345.00	502.50	0.00	0.00	1072.50
3/26 16:19	0.00	0.00	158.67	289.17	494.17	520.00	0.00	0.00	1303.34

Timestamp	Secondary Voltage 4 - 1-Min	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min
Average (all)	0.00	0.00	155.40	197.78	364.27	471.77	0.00	0.00	1033.82
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	0.00	0.00	136.83	55.00	126.67	295.83	0.00	0.00	572.50
Maximum (all)	0.00	0.00	163.33	345.83	494.17	520.00	0.00	0.00	1321.66
Average (valid values only)	0.00	0.00	155.40	197.78	364.27	471.77	0.00	0.00	1033.82
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	102	102	102	102	102	102	102	102	102

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 2:38 PM thru 3/26/2005 4:19 PM

Timestamp	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 14:38	24.4	2.64	2.59	782.1	253.0	266.7	144.83	226.17	266.33
3/26 14:39	27.4	2.64	2.59	780.8	253.5	266.9	140.00	247.00	267.67
3/26 14:40	31.2	2.63	2.60	777.9	253.9	267.1	170.50	240.17	273.17
3/26 14:41	37.5	2.63	2.59	772.6	254.2	267.6	184.67	262.00	275.00
3/26 14:42	43.3	2.64	2.59	764.3	254.9	268.0	138.00	239.50	216.50
3/26 14:43	42.8	2.63	2.59	754.2	256.0	268.5	139.67	178.00	268.33
3/26 14:44	36.8	2.64	2.59	746.8	255.1	269.3	147.50	249.00	271.83
3/26 14:45	28.5	2.63	2.59	743.7	255.0	269.8	141.33	254.33	278.33
3/26 14:46	24.6	2.64	2.59	745.6	255.6	269.5	121.83	238.50	271.50
3/26 14:47	24.2	2.64	2.59	751.4	256.3	269.2	157.67	229.50	271.33
3/26 14:48	22.6	2.64	2.58	759.0	256.6	268.7	138.83	246.67	268.00
3/26 14:49	22.6	2.64	2.59	765.4	256.8	268.1	158.50	261.17	275.33
3/26 14:50	20.9	2.63	2.59	771.0	257.2	267.4	149.50	251.67	271.67
3/26 14:51	19.9	2.63	2.59	776.4	257.5	266.8	122.83	89.17	255.17
3/26 14:52	19.8	2.63	2.60	782.1	257.6	265.7	119.17	185.17	267.33
3/26 14:53	19.6	2.64	2.59	785.0	257.8	265.0	122.67	243.83	275.33
3/26 14:54	20.0	2.64	2.59	785.9	258.5	264.2	105.67	192.00	263.83
3/26 14:55	20.6	2.64	2.59	787.7	259.3	263.5	91.67	148.33	257.67
3/26 14:56	23.6	2.64	2.59	788.5	260.0	263.3	108.33	241.50	269.83
3/26 14:57	25.5	2.64	2.59	786.7	260.4	263.4	138.67	241.33	269.17
3/26 14:58	28.4	2.64	2.59	780.7	260.1	263.8	138.33	257.83	272.83
3/26 14:59	27.7	2.64	2.60	770.8	260.7	264.5	112.67	240.17	265.83
3/26 15:00	24.1	2.64	2.59	761.8	260.5	265.6	99.67	219.17	268.00
3/26 15:01	23.5	2.64	2.60	759.6	258.8	266.4	110.33	239.83	267.33
3/26 15:02	22.2	2.63	2.59	762.5	258.1	266.6	146.67	254.83	271.00
3/26 15:03	20.4	2.64	2.59	767.2	257.2	266.3	115.67	241.17	275.17
3/26 15:04	20.2	2.64	2.59	771.8	256.1	265.7	169.67	250.67	270.17
3/26 15:05	19.3	2.64	2.60	775.2	255.7	265.1	125.83	255.17	272.17
3/26 15:06	18.2	2.63	2.59	778.5	255.2	264.6	167.33	229.00	272.00
3/26 15:07	17.9	2.64	2.60	781.6	254.8	264.2	152.67	224.00	269.00
3/26 15:08	18.9	2.63	2.59	783.2	255.0	263.8	111.83	233.83	240.67
3/26 15:09	19.5	2.64	2.59	783.5	255.4	263.9	93.00	97.50	253.00

Timestamp	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 15:10	19.3	2.63	2.59	781.3	255.3	263.9	137.67	222.00	269.00
3/26 15:11	19.5	2.63	2.58	775.8	255.3	263.9	105.50	246.33	272.50
3/26 15:12	18.8	2.65	2.59	770.4	255.4	264.1	74.00	205.83	263.67
3/26 15:13	19.5	2.64	2.60	768.1	255.4	264.1	70.17	235.50	209.50
3/26 15:14	19.8	2.64	2.59	769.2	255.5	264.0	91.33	190.17	265.17
3/26 15:15	19.8	2.63	2.59	770.5	255.5	264.1	86.67	201.67	263.00
3/26 15:16	20.7	2.64	2.59	770.5	255.6	264.4	123.67	247.50	269.83
3/26 15:17	20.4	2.64	2.60	769.2	255.7	264.2	81.50	250.33	273.17
3/26 15:18	20.2	2.64	2.58	767.2	255.7	264.2	68.67	215.33	260.17
3/26 15:19	20.5	2.65	2.60	766.6	255.7	264.2	100.00	245.33	267.67
3/26 15:20	20.4	2.64	2.59	767.0	255.9	264.2	78.67	231.50	263.17
3/26 15:21	20.0	2.63	2.59	768.1	256.0	264.4	154.67	253.50	272.33
3/26 15:22	19.8	2.64	2.59	770.3	255.9	264.3	96.50	116.50	255.50
3/26 15:23	20.1	2.64	2.59	772.5	256.0	264.3	78.67	148.67	261.17
3/26 15:24	19.9	2.63	2.59	773.6	256.2	264.5	120.50	235.50	272.67
3/26 15:25	19.9	2.63	2.59	773.1	256.2	264.3	137.00	239.00	275.50
3/26 15:26	20.2	2.63	2.59	771.8	256.2	264.4	112.17	246.83	273.83
3/26 15:27	20.4	2.63	2.59	771.3	256.3	264.4	133.00	252.33	275.00
3/26 15:28	20.7	2.64	2.59	771.2	256.3	264.4	105.00	227.83	272.67
3/26 15:29	20.7	2.64	2.60	771.8	256.3	264.5	97.67	201.50	262.00
3/26 15:30	20.4	2.64	2.59	771.0	256.3	264.5	89.00	204.00	262.17
3/26 15:31	20.2	2.64	2.60	769.4	256.2	264.5	124.00	232.17	269.83
3/26 15:32	20.4	2.63	2.59	767.5	256.2	264.6	139.50	253.67	277.00
3/26 15:33	20.9	2.64	2.59	767.2	256.0	264.7	89.00	211.83	270.50
3/26 15:34	20.7	2.63	2.60	768.6	256.0	264.6	49.17	208.50	262.50
3/26 15:35	21.2	2.64	2.59	770.7	255.9	264.7	81.83	159.50	250.33
3/26 15:36	22.2	2.64	2.59	771.4	256.0	264.8	81.83	217.67	259.50
3/26 15:37	22.2	2.64	2.59	769.6	256.0	265.1	122.17	127.83	256.17
3/26 15:38	22.3	2.64	2.59	765.7	256.0	265.1	96.33	138.50	259.83
3/26 15:39	22.0	2.64	2.59	762.1	256.0	265.2	128.83	238.83	265.83
3/26 15:40	22.2	2.64	2.59	760.6	255.9	265.1	115.17	261.00	270.00
3/26 15:41	21.9	2.64	2.59	762.4	255.9	265.1	114.17	178.50	264.50
3/26 15:42	22.4	2.64	2.60	765.7	255.9	264.7	90.17	214.67	264.33
3/26 15:43	22.6	2.64	2.59	768.8	255.8	264.6	81.67	146.67	254.83
3/26 15:44	21.8	2.64	2.59	771.7	255.8	264.5	43.33	214.50	253.33
3/26 15:45	21.8	2.63	2.59	773.5	255.7	264.3	44.50	68.83	243.50

Timestamp	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
3/26 15:46	22.1	2.63	2.59	775.4	255.6	264.2	65.33	120.50	253.83
3/26 15:47	21.9	2.63	2.59	775.6	255.6	264.2	56.00	165.67	266.67
3/26 15:48	21.6	2.63	2.59	773.8	255.5	264.2	69.83	214.00	267.83
3/26 15:49	21.4	2.63	2.59	771.5	255.5	264.2	114.33	244.67	263.33
3/26 15:50	21.4	2.64	2.60	770.2	255.5	264.1	129.67	246.67	277.67
3/26 15:51	21.6	2.63	2.59	770.0	255.6	264.2	70.00	228.83	268.33
3/26 15:52	21.2	2.63	2.60	770.9	255.7	263.9	86.00	74.83	151.67
3/26 15:53	21.3	2.63	2.59	774.6	255.9	263.9	22.00	108.33	203.83
3/26 15:54	21.6	2.64	2.59	777.2	256.1	263.9	29.83	65.50	234.00
3/26 15:55	21.5	2.64	2.59	776.3	256.1	264.1	65.67	155.00	255.33
3/26 15:56	21.5	2.64	2.60	772.0	256.1	264.2	92.33	182.33	259.50
3/26 15:57	21.6	2.64	2.59	768.2	256.1	264.2	61.33	164.00	244.83
3/26 15:58	22.3	2.64	2.59	767.5	256.0	264.3	34.83	179.33	251.83
3/26 15:59	21.3	2.64	2.59	768.7	255.9	264.4	99.67	182.33	258.50
3/26 16:00	21.7	2.64	2.58	770.8	255.9	264.4	55.33	116.50	242.00
3/26 16:01	20.7	2.64	2.59	771.1	255.8	264.3	67.00	137.17	253.83
3/26 16:02	21.1	2.63	2.59	770.9	255.8	264.1	51.17	114.83	239.17
3/26 16:03	21.1	2.63	2.59	771.8	255.9	264.0	49.67	103.17	229.83
3/26 16:04	21.0	2.64	2.60	774.3	255.8	264.1	53.83	186.67	246.17
3/26 16:05	20.2	2.63	2.59	777.8	255.7	264.3	58.17	206.00	256.33
3/26 16:06	20.0	2.64	2.58	780.9	255.4	264.4	47.00	58.33	225.00
3/26 16:07	20.1	2.64	2.58	781.9	255.3	264.5	96.50	158.83	244.67
3/26 16:08	21.2	2.63	2.59	777.3	255.7	264.5	46.67	132.17	249.33
3/26 16:09	20.7	2.64	2.59	771.8	255.6	264.8	53.17	80.50	210.33
3/26 16:10	21.0	2.63	2.59	767.5	255.6	264.9	43.33	87.17	222.50
3/26 16:11	20.9	2.64	2.59	766.1	255.7	265.4	95.67	154.83	249.33
3/26 16:12	21.8	2.63	2.59	766.0	255.8	265.6	82.83	132.67	180.67
3/26 16:13	22.0	2.63	2.59	766.7	255.8	265.8	48.17	61.50	178.83
3/26 16:14	22.0	2.64	2.60	766.3	256.0	265.9	59.67	162.00	251.17
3/26 16:15	21.4	2.63	2.59	764.5	255.9	266.2	62.83	184.83	254.33
3/26 16:16	21.2	2.63	2.59	764.2	255.8	266.3	55.00	159.00	259.33
3/26 16:17	21.1	2.64	2.59	766.8	256.1	266.3	124.50	147.17	260.83
3/26 16:18	24.4	2.64	2.59	770.0	256.6	266.3	111.50	179.50	275.50
3/26 16:19	31.0	2.64	2.60	768.8	256.9	266.6	149.17	269.33	283.00

Timestamp	UREA Injection gal/hr 1-Min	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min
Average (all)	22.3	2.64	2.59	770.7	256.1	265.1	100.36	194.73	257.66
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	17.9	2.63	2.58	743.7	253.0	263.3	22.00	58.33	151.67
Maximum (all)	43.3	2.65	2.60	788.5	260.7	269.8	184.67	269.33	283.00
Average (valid values only)	22.3	2.64	2.59	770.7	256.1	265.1	100.36	194.73	257.66
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	102	102	102	102	102	102	102	102	102

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 2:38 PM thru 3/26/2005 4:19 PM

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA - 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 14:38	0.00	0.00	637.33	601.00	615.70	1101.55	8.05	8.32
3/26 14:39	0.00	0.00	654.67	610.85	625.55	1106.10	7.94	8.17
3/26 14:40	0.00	0.00	683.84	618.10	632.80	1102.24	7.84	8.08
3/26 14:41	0.00	0.00	721.67	620.78	635.48	1101.56	7.93	8.17
3/26 14:42	0.00	0.00	594.00	606.56	621.26	1130.76	7.78	8.04
3/26 14:43	0.00	0.00	586.00	594.43	609.13	1108.28	7.86	8.12
3/26 14:44	0.00	0.00	668.33	583.99	598.69	1022.88	7.65	7.90
3/26 14:45	0.00	0.00	673.99	566.78	581.48	995.92	7.69	7.94
3/26 14:46	0.00	0.00	631.83	548.17	562.87	1020.47	7.73	8.01
3/26 14:47	0.00	0.00	658.50	530.36	545.06	1018.38	7.59	7.85
3/26 14:48	0.00	0.00	653.50	515.83	530.53	985.87	7.56	7.84
3/26 14:49	0.00	0.00	695.00	511.26	525.96	933.30	7.58	7.81
3/26 14:50	0.00	0.00	672.84	507.01	521.71	928.07	7.60	7.82
3/26 14:51	0.00	0.00	467.17	507.10	521.80	928.10	7.58	7.79
3/26 14:52	0.00	0.00	571.67	508.24	522.94	933.55	7.62	7.84
3/26 14:53	0.00	0.00	641.83	508.90	523.60	999.35	7.69	7.94
3/26 14:54	0.00	0.00	561.50	510.62	525.32	1079.08	7.61	7.86
3/26 14:55	0.00	0.00	497.67	515.01	529.71	1111.02	7.43	7.66
3/26 14:56	0.00	0.00	619.66	518.70	533.40	1121.40	7.53	7.75
3/26 14:57	0.00	0.00	649.17	521.53	536.23	1114.53	7.60	7.81
3/26 14:58	0.00	0.00	668.99	512.33	527.03	1121.94	7.57	7.79
3/26 14:59	0.00	0.00	618.67	500.71	515.41	1129.61	7.71	7.93
3/26 15:00	0.00	0.00	586.84	495.77	510.47	1051.49	7.71	7.94
3/26 15:01	0.00	0.00	617.49	493.98	508.68	941.91	7.68	7.87
3/26 15:02	0.00	0.00	672.50	494.22	508.92	925.27	7.56	7.76
3/26 15:03	0.00	0.00	632.01	498.59	513.29	925.22	7.52	7.75
3/26 15:04	0.00	0.00	690.51	499.66	514.36	976.57	7.50	7.73
3/26 15:05	0.00	0.00	653.17	502.71	517.41	1024.17	7.52	7.76
3/26 15:06	0.00	0.00	668.33	506.75	521.45	1050.24	7.59	7.80
3/26 15:07	0.00	0.00	645.67	510.99	525.69	1074.91	7.56	7.80
3/26 15:08	0.00	0.00	586.33	515.77	530.47	1094.10	7.60	7.81
3/26 15:09	0.00	0.00	443.50	521.54	536.24	1091.83	7.64	7.85

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 15:10	0.00	0.00	628.67	526.26	540.96	1077.56	7.52	7.74
3/26 15:11	0.00	0.00	624.33	530.20	544.90	1058.29	7.54	7.76
3/26 15:12	0.00	0.00	543.50	534.49	549.19	1054.77	7.57	7.77
3/26 15:13	0.00	0.00	515.17	538.73	553.43	1065.76	7.52	7.75
3/26 15:14	0.00	0.00	546.67	543.66	558.36	1070.76	7.52	7.72
3/26 15:15	0.00	0.00	551.34	547.14	561.84	1064.95	7.51	7.72
3/26 15:16	0.00	0.00	641.00	550.05	564.75	1060.93	7.53	7.70
3/26 15:17	0.00	0.00	605.00	551.50	566.20	1061.53	7.45	7.65
3/26 15:18	0.00	0.00	544.17	553.43	568.13	1041.63	7.57	7.76
3/26 15:19	0.00	0.00	613.00	555.19	569.89	1039.98	7.52	7.74
3/26 15:20	0.00	0.00	573.34	554.83	569.53	1058.46	7.51	7.70
3/26 15:21	0.00	0.00	680.50	556.88	571.58	1043.68	7.59	7.78
3/26 15:22	0.00	0.00	468.50	560.06	574.76	1034.53	7.62	7.82
3/26 15:23	0.00	0.00	488.51	562.68	577.38	1049.25	7.59	7.81
3/26 15:24	0.00	0.00	628.67	566.19	580.89	1045.56	7.61	7.83
3/26 15:25	0.00	0.00	651.50	568.81	583.51	1055.43	7.66	7.85
3/26 15:26	0.00	0.00	632.83	572.14	586.84	1054.10	7.64	7.85
3/26 15:27	0.00	0.00	660.33	574.90	589.60	1058.88	7.59	7.81
3/26 15:28	0.00	0.00	605.50	578.32	593.02	1055.96	7.71	7.90
3/26 15:29	0.00	0.00	561.17	582.05	596.75	1051.41	7.61	7.81
3/26 15:30	0.00	0.00	555.17	584.54	599.24	1051.38	7.62	7.82
3/26 15:31	0.00	0.00	626.00	586.60	601.30	1044.09	7.61	7.81
3/26 15:32	0.00	0.00	670.17	587.88	602.58	1046.78	7.66	7.88
3/26 15:33	0.00	0.00	571.33	587.89	602.59	1062.58	7.69	7.89
3/26 15:34	0.00	0.00	520.17	588.88	603.58	1065.74	7.70	7.91
3/26 15:35	0.00	0.00	491.66	589.09	603.79	1059.78	7.74	7.95
3/26 15:36	0.00	0.00	559.00	588.69	603.39	1059.54	7.67	7.86
3/26 15:37	0.00	0.00	506.17	586.44	601.14	1054.40	7.69	7.91
3/26 15:38	0.00	0.00	494.66	581.91	596.61	1046.92	7.71	7.88
3/26 15:39	0.00	0.00	633.49	576.96	591.66	1038.89	7.73	7.94
3/26 15:40	0.00	0.00	646.17	573.21	587.91	1012.70	7.81	8.00
3/26 15:41	0.00	0.00	557.17	568.20	582.90	1016.00	7.73	7.95
3/26 15:42	0.00	0.00	569.17	562.80	577.50	1023.44	7.73	7.92
3/26 15:43	0.00	0.00	483.17	559.23	573.93	1022.15	7.75	7.91
3/26 15:44	0.00	0.00	511.16	557.55	572.25	1020.67	7.70	7.90
3/26 15:45	0.00	0.00	356.83	555.90	570.60	1029.58	7.74	7.97

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 15:46	0.00	0.00	439.66	555.21	569.91	1040.42	7.77	7.98
3/26 15:47	0.00	0.00	488.34	554.60	569.30	1044.99	7.73	7.93
3/26 15:48	0.00	0.00	551.66	553.45	568.15	1046.11	7.71	7.90
3/26 15:49	0.00	0.00	622.33	552.90	567.60	1039.73	7.73	7.91
3/26 15:50	0.00	0.00	654.01	552.39	567.09	1034.79	7.70	7.93
3/26 15:51	0.00	0.00	567.16	551.66	566.36	1040.42	7.80	7.99
3/26 15:52	0.00	0.00	312.50	552.80	567.50	1030.64	7.78	7.97
3/26 15:53	0.00	0.00	334.16	555.19	569.89	1050.19	7.81	8.01
3/26 15:54	0.00	0.00	329.33	556.69	571.39	1062.95	7.85	8.05
3/26 15:55	0.00	0.00	476.00	558.98	573.68	1046.89	7.70	7.92
3/26 15:56	0.00	0.00	534.16	558.25	572.95	1043.02	7.74	7.95
3/26 15:57	0.00	0.00	470.16	558.25	572.95	1047.19	7.87	8.11
3/26 15:58	0.00	0.00	465.99	559.38	574.08	1038.39	7.77	8.00
3/26 15:59	0.00	0.00	540.50	560.45	575.15	1027.07	7.82	8.05
3/26 16:00	0.00	0.00	413.83	563.04	577.74	1017.55	7.74	7.97
3/26 16:01	0.00	0.00	458.00	563.49	578.19	1025.74	7.76	8.00
3/26 16:02	0.00	0.00	405.17	564.00	578.70	1043.94	7.81	8.01
3/26 16:03	0.00	0.00	382.67	567.45	582.15	1044.98	7.88	8.09
3/26 16:04	0.00	0.00	486.67	574.39	589.09	1032.00	7.92	8.15
3/26 16:05	0.00	0.00	520.50	584.50	599.20	1025.08	7.89	8.12
3/26 16:06	0.00	0.00	330.33	597.79	612.49	1012.78	7.85	8.10
3/26 16:07	0.00	0.00	500.00	602.17	616.87	1069.74	7.84	8.04
3/26 16:08	0.00	0.00	428.17	607.14	621.84	1092.59	8.01	8.25
3/26 16:09	0.00	0.00	344.00	614.02	628.72	1065.91	8.01	8.22
3/26 16:10	0.00	0.00	353.00	619.70	634.40	1059.45	8.00	8.21
3/26 16:11	0.00	0.00	499.83	624.94	639.64	1058.12	7.98	8.17
3/26 16:12	0.00	0.00	396.17	629.40	644.10	1052.72	8.08	8.27
3/26 16:13	0.00	0.00	288.50	634.00	648.70	1050.10	7.96	8.16
3/26 16:14	0.00	0.00	472.84	637.29	651.99	1045.22	7.95	8.17
3/26 16:15	0.00	0.00	501.99	643.51	658.21	1014.10	8.05	8.26
3/26 16:16	0.00	0.00	473.33	652.87	667.57	990.81	7.94	8.16
3/26 16:17	0.00	0.00	532.50	656.25	670.95	1052.12	8.00	8.21
3/26 16:18	0.00	0.00	566.50	657.35	672.05	1092.50	8.01	8.22
3/26 16:19	0.00	0.00	701.50	651.23	665.93	1099.34	8.02	8.22

Timestamp	Secondary Power Input 4 - 1-Min	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
Average (all)	0.00	0.00	552.75	563.00	577.70	1044.56	7.72	7.93
Total (all)	--	--	--	--	--	--	--	--
Minimum (all)	0.00	0.00	288.50	493.98	508.68	925.22	7.43	7.65
Maximum (all)	0.00	0.00	721.67	657.35	672.05	1130.76	8.08	8.32
Average (valid values only)	0.00	0.00	552.75	563.00	577.70	1044.56	7.72	7.93
Total (valid values only)	--	--	--	--	--	--	--	--
Count (valid values only)	102	102	102	102	102	102	102	102

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 5:19 PM thru 3/26/2005 7:05 PM

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 17:19	69.92	64.92	0.1225	111.52	365.87	339.72	0.3902	355.19	5.93
3/26 17:20	60.55	57.25	0.1047	96.02	376.21	355.74	0.3960	363.13	6.20
3/26 17:21	48.46	47.14	0.0832	76.14	337.25	328.05	0.3523	322.52	6.61
3/26 17:22	43.32	42.52	0.0750	68.83	361.75	355.11	0.3810	349.85	6.74
3/26 17:23	43.51	42.35	0.0748	68.88	393.13	382.67	0.4114	378.82	6.62
3/26 17:24	44.95	43.78	0.0786	71.38	372.88	363.21	0.3969	360.41	6.63
3/26 17:25	52.06	50.22	0.0925	82.67	374.96	361.69	0.4053	362.44	6.49
3/26 17:26	64.25	62.11	0.1125	100.73	374.85	362.34	0.3994	357.70	6.52
3/26 17:27	77.59	75.00	0.1373	122.69	378.24	365.61	0.4074	364.05	6.52
3/26 17:28	84.37	82.94	0.1461	131.87	350.05	344.11	0.3691	333.04	6.76
3/26 17:29	88.67	86.25	0.1527	137.89	358.00	348.23	0.3752	338.88	6.61
3/26 17:30	88.95	86.70	0.1556	138.95	363.96	354.77	0.3876	346.07	6.64
3/26 17:31	85.66	84.33	0.1518	132.21	308.62	303.81	0.3329	289.93	6.78
3/26 17:32	81.46	80.42	0.1503	128.20	317.30	313.24	0.3563	303.96	6.82
3/26 17:33	76.66	75.15	0.1417	120.41	332.82	326.25	0.3746	318.20	6.72
3/26 17:34	70.23	68.75	0.1291	108.77	358.90	351.32	0.4016	338.36	6.70
3/26 17:35	62.81	61.79	0.1166	97.14	368.85	362.85	0.4167	347.22	6.77
3/26 17:36	55.46	54.75	0.1045	87.42	356.89	352.33	0.4094	342.42	6.82
3/26 17:37	54.08	52.71	0.1001	83.76	362.11	352.97	0.4081	341.39	6.64
3/26 17:38	53.17	51.83	0.0978	82.30	380.72	371.11	0.4262	358.73	6.64
3/26 17:39	55.75	54.15	0.1015	86.17	402.26	390.73	0.4460	378.47	6.59
3/26 17:40	60.20	58.31	0.1106	94.61	405.17	392.46	0.4530	387.60	6.55
3/26 17:41	66.29	64.94	0.1179	103.35	330.34	323.59	0.3578	313.50	6.71
3/26 17:42	73.35	71.95	0.1316	112.17	311.82	305.88	0.3406	290.25	6.73
3/26 17:43	80.19	78.28	0.1484	123.69	324.78	317.03	0.3659	304.94	6.66
3/26 17:44	85.84	82.17	0.1572	131.86	394.76	377.90	0.4401	369.10	6.38
3/26 17:45	56.53 <25>	83.50 <25>	0.1325 <25>	112.07 <25>	255.86 <25>	377.94 <25>	0.3651 <25>	308.77 <25>	11.49 <25>
3/26 17:46	88.70 <25>	84.80 <25>	0.2076 <25>	175.88 <25>	367.61 <25>	351.43 <25>	0.5238 <25>	443.68 <25>	6.36 <25>
3/26 17:47	84.77	82.00	0.1577	133.73	377.80	365.44	0.4278	362.78	6.53
3/26 17:48	74.77	72.98	0.1387	116.98	387.83	378.57	0.4378	369.34	6.66
3/26 17:49	68.62	67.27	0.1273	107.57	328.74	322.25	0.3714	313.69	6.72
3/26 17:50	59.74	58.03	0.1096	92.84	363.06	352.66	0.4054	343.46	6.59
3/26 17:51	53.21	52.16	0.0958	81.78	333.15	326.57	0.3651	311.68	6.72

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 17:52	51.98	50.46	0.0939	80.35	347.96	337.75	0.3827	327.40	6.58
3/26 17:53	50.15	48.58	0.0906	77.13	345.46	334.63	0.3799	323.39	6.55
3/26 17:54	52.54	51.03	0.0953	81.47	334.70	325.11	0.3694	315.92	6.59
3/26 17:55	60.18	58.01	0.1113	93.99	354.74	341.95	0.3993	337.24	6.48
3/26 17:56	69.86	67.06	0.1280	107.17	377.66	362.53	0.4212	352.64	6.42
3/26 17:57	80.73	77.39	0.1491	125.47	388.00	371.94	0.4363	367.05	6.40
3/26 17:58	88.75	85.37	0.1687	140.20	359.81	346.11	0.4162	345.97	6.45
3/26 17:59	93.77	90.26	0.1733	144.10	313.26	301.55	0.3524	293.03	6.46
3/26 18:00	92.04	87.09	0.1696	142.79	388.22	367.34	0.4353	366.60	6.21
3/26 18:01	87.28	82.03	0.1653	139.22	432.62	406.59	0.4988	420.03	6.11
3/26 18:02	77.05	72.96	0.1363	120.00	404.12	382.65	0.4351	383.10	6.22
3/26 18:03	66.41	62.67	0.1173	104.81	420.50	396.81	0.4521	403.95	6.17
3/26 18:04	54.92	51.20	0.0952	84.78	470.23	438.38	0.4959	441.85	5.99
3/26 18:05	45.51	42.63	0.0792	71.35	492.92	461.70	0.5221	470.38	6.06
3/26 18:06	40.57	38.44	0.0706	64.52	443.73	420.44	0.4697	429.51	6.23
3/26 18:07	38.17	36.54	0.0645	59.22	405.14	387.84	0.4168	382.64	6.38
3/26 18:08	44.25	41.53	0.0759	68.78	482.12	452.50	0.5035	456.15	6.09
3/26 18:09	53.28	50.41	0.0923	82.52	435.59	412.16	0.4591	410.63	6.21
3/26 18:10	67.62	62.91	0.1157	102.99	484.86	451.11	0.5051	449.51	5.96
3/26 18:11	80.50	74.25	0.1438	126.48	486.89	449.09	0.5294	465.66	5.83
3/26 18:12	86.10	80.81	0.1545	135.98	422.12	396.18	0.4611	405.81	6.09
3/26 18:13	87.76	83.10	0.1556	135.75	449.08	425.22	0.4846	422.84	6.22
3/26 18:14	88.28	82.86	0.1578	135.23	454.68	426.74	0.4948	423.96	6.09
3/26 18:15	83.57	78.97	0.1492	128.97	434.50	410.57	0.4722	408.15	6.19
3/26 18:16	77.87	73.58	0.1374	120.01	448.26	423.58	0.4815	420.52	6.19
3/26 18:17	73.39	67.92	0.1289	112.99	514.02	475.69	0.5494	481.70	5.88
3/26 18:18	67.82	63.18	0.1200	105.59	483.45	450.40	0.5206	458.17	5.98
3/26 18:19	59.52	55.19	0.1062	93.50	466.93	432.98	0.5073	446.47	5.91
3/26 18:20	56.30	52.59	0.0991	87.35	486.76	454.70	0.5217	459.68	6.02
3/26 18:21	52.74	50.07	0.0940	82.31	437.39	415.28	0.4745	415.49	6.26
3/26 18:22	53.46	50.72	0.0931	82.50	447.72	424.80	0.4745	420.59	6.25
3/26 18:23	58.39	55.17	0.0998	89.18	424.79	401.40	0.4418	394.92	6.19
3/26 18:24	62.76	59.87	0.1100	98.27	390.13	372.19	0.4160	371.82	6.33
3/26 18:25	70.51	67.50	0.1195	107.45	373.63	357.68	0.3853	346.58	6.38
3/26 18:26	80.28	75.96	0.1404	124.25	389.36	368.42	0.4145	366.80	6.21
3/26 18:27	84.65	79.45	0.1536	129.87	415.85	390.30	0.4593	388.36	6.09

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 18:28	86.30	80.78	0.1546	132.32	397.05	371.65	0.4328	370.56	6.05
3/26 18:29	87.37	81.23	0.1584	136.25	457.79	425.64	0.5051	434.55	5.95
3/26 18:30	86.31	81.06	0.1529	134.08	392.15	368.30	0.4228	370.82	6.10
3/26 18:31	83.32	77.21	0.1463	128.24	399.77	370.45	0.4273	374.52	5.90
3/26 18:32	76.82	70.57	0.1363	118.15	481.07	441.96	0.5194	450.35	5.77
3/26 18:33	63.44	59.58	0.1165	99.59	445.17	418.10	0.4976	425.40	6.10
3/26 18:34	48.19	45.60	0.0877	75.78	466.52	441.43	0.5169	446.54	6.21
3/26 18:35	41.19	38.17	0.0661	63.41	581.81	539.14	0.5684	545.20	5.90
3/26 18:36	38.59	35.66	0.0607	60.23	598.90	553.50	0.5735	568.99	5.86
3/26 18:37	35.14	33.71	0.0577	54.51	488.99	469.08	0.4886	461.73	6.41
3/26 18:38	40.20	38.09	0.0657	60.47	498.54	472.37	0.4963	456.51	6.23
3/26 18:39	50.38	47.61	0.0877	79.16	458.55	433.30	0.4857	438.55	6.19
3/26 18:40	60.24	56.96	0.1069	95.53	485.62	459.19	0.5244	468.76	6.20
3/26 18:41	66.69	63.02	0.1187	104.66	447.90	423.24	0.4853	427.87	6.19
3/26 18:42	67.05	63.23	0.1224	104.16	530.31	500.09	0.5891	501.48	6.16
3/26 18:43	71.55	66.88	0.1420	113.65	498.80	466.26	0.6027	482.28	6.03
3/26 18:44	73.76	70.42	0.1514	115.54	482.53	460.66	0.6028	460.10	6.34
3/26 18:45	77.47	73.15	0.1656	125.54	471.30	445.05	0.6134	464.89	6.18
3/26 18:46	78.00	74.62	0.1566	125.01	466.98	446.73	0.5707	455.57	6.37
3/26 18:47	76.28	71.40	0.1529	125.89	531.25	497.26	0.6483	533.68	6.05
3/26 18:48	67.79	62.90	0.1306	111.52	510.44	473.64	0.5988	511.15	5.92
3/26 18:49	58.15	53.46	0.1075	96.40	530.45	487.65	0.5969	535.26	5.78
3/26 18:50	47.69	45.16	0.0888	77.72	502.62	475.91	0.5697	498.56	6.22
3/26 18:51	39.26	37.17	0.0763	63.41	514.43	487.10	0.6089	505.79	6.22
3/26 18:52	35.59	35.31	0.0768	56.29	528.25	524.10	0.6939	508.53	6.89
3/26 18:53	38.96	40.11	0.0872	61.44	760.53	783.06	1.0365	730.09	7.40
3/26 18:54	50.85	45.63	0.0947	74.25	1134.35	1017.91	1.2856	1008.27	5.41
3/26 18:55	69.45	61.10	0.1312	112.59	653.26	574.70	0.7514	644.66	5.10
3/26 18:56	77.68	73.75	0.1383	123.14	399.70	379.50	0.4332	385.66	6.26
3/26 18:57	76.06	72.56	0.1420	120.49	427.77	408.10	0.4859	412.47	6.33
3/26 18:58	68.35	65.75	0.1231	107.34	429.56	413.21	0.4708	410.63	6.45
3/26 18:59	65.06	61.56	0.1193	104.78	529.16	500.70	0.5906	518.73	6.21
3/26 19:00	61.49	59.56	0.1095	97.13	438.71	424.95	0.4756	421.84	6.55
3/26 19:01	58.92	56.10	0.1016	92.58	457.28	435.36	0.4800	437.36	6.30
3/26 19:02	57.72	56.50	0.0973	91.21	408.74	400.10	0.4193	393.15	6.70
3/26 19:03	58.99	57.95	0.0976	91.26	407.33	400.13	0.4100	383.56	6.75

Timestamp	NOx ppm 1-Min	NOx ppm @ 7% O2 1-Min	NOx lb/mmBtu 1-Min	NOx lb/hr 1-Min Avg	CO ppm 1-Min	CO ppm @ 7% O2 1 Min	CO lb/mmBtu 1-Min	CO lb/hr 1-Min	O2% 1-Min
3/26 19:04	62.87	61.59	0.1134	99.95	426.63	417.91	0.4682	412.84	6.71
3/26 19:05	68.07	67.58	0.1337	106.79	397.32	394.48	0.4749	379.40	6.90
Average (all)	65.65	62.91	0.1196	103.25	430.11	410.78	0.4762	411.03	6.38
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	35.14	33.71	0.0577	54.51	255.86	301.55	0.3329	289.93	5.10
Maximum (all)	93.77	90.26	0.2076	175.88	1134.35	1017.91	1.2856	1008.27	11.49
Average (valid values only)	65.51	62.51	0.1186	102.47	432.36	411.66	0.4768	411.69	6.33
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	105	105	105	105	105	105	105	105	105

<25> = Backflush

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 5:19 PM thru 3/26/2005 7:05 PM

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min
3/26 17:19	21.25	13359160	910.3	1152.085	489.90	48.67	52.00	54.67	0.00
3/26 17:20	20.65	13282180	917.0	1151.700	493.63	42.83	52.17	54.83	0.00
3/26 17:21	21.03	13159600	915.5	1149.951	493.57	47.00	54.00	54.83	0.00
3/26 17:22	21.22	13308110	918.2	1148.481	495.66	46.00	54.67	54.50	0.00
3/26 17:23	21.15	13259800	920.7	1148.676	496.96	44.67	54.67	54.67	0.00
3/26 17:24	21.27	13300570	908.0	1150.726	489.24	44.00	52.83	55.00	0.00
3/26 17:25	21.26	13301350	894.2	1153.874	480.46	44.50	51.67	55.00	0.00
3/26 17:26	21.93	13131330	895.6	1156.898	479.94	45.17	46.50	54.83	0.00
3/26 17:27	21.63	13244300	893.5	1159.074	477.92	48.50	43.83	54.50	0.00
3/26 17:28	22.19	13092090	902.3	1159.603	482.45	44.67	54.33	55.00	0.00
3/26 17:29	22.24	13025860	903.3	1159.358	483.04	45.67	54.67	54.67	0.00
3/26 17:30	21.54	13084490	892.8	1158.906	477.65	48.33	53.50	54.83	0.00
3/26 17:31	22.12	12927500	870.8	1158.838	465.89	47.67	53.50	54.33	0.00
3/26 17:32	20.97	13182270	853.1	1159.650	456.08	41.50	54.83	54.83	0.00
3/26 17:33	20.39	13156390	849.5	1160.999	453.65	45.50	49.83	54.67	0.00
3/26 17:34	22.24	12973110	842.6	1162.551	449.35	41.83	48.67	54.67	0.00
3/26 17:35	22.01	12953770	833.2	1163.562	443.98	45.67	49.17	55.00	0.00
3/26 17:36	21.26	13202730	836.3	1163.538	445.61	46.00	48.33	53.67	0.00
3/26 17:37	21.54	12973480	836.5	1163.088	445.89	40.83	53.33	54.83	0.00
3/26 17:38	21.23	12965830	841.7	1162.503	448.88	42.50	53.00	54.83	0.00
3/26 17:39	21.70	12947020	848.6	1161.627	452.94	48.33	54.00	55.00	0.00
3/26 17:40	20.76	13164110	855.7	1160.652	457.11	46.00	50.50	54.83	0.00
3/26 17:41	21.01	13059320	876.3	1158.635	468.94	46.50	52.50	54.50	0.00
3/26 17:42	21.40	12808750	852.1	1156.822	456.66	49.17	40.83	54.50	0.00
3/26 17:43	21.47	12920100	833.5	1156.872	446.67	43.17	50.83	54.17	0.00
3/26 17:44	22.88	12866330	838.7	1158.764	448.73	48.50	49.83	54.00	0.00
3/26 17:45	0.00	16606100	845.8	1161.007	451.67	46.50	51.83	55.00	0.00
3/26 17:46	0.00	16608390	847.1	1161.459	452.19	46.33	50.17	54.50	0.00
3/26 17:47	20.06	13213650	848.1	1159.880	453.35	43.67	54.83	55.00	0.00
3/26 17:48	20.72	13104560	843.6	1157.116	452.01	46.33	54.67	54.33	0.00
3/26 17:49	21.28	13130560	844.7	1154.582	453.59	49.33	53.33	54.83	0.00

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min
3/26 17:50	21.24	13017710	847.3	1153.419	455.47	44.00	43.33	54.67	0.00
3/26 17:51	21.73	12873780	853.6	1153.157	458.92	47.50	46.50	55.00	0.00
3/26 17:52	21.28	12947800	855.6	1153.549	459.84	49.17	54.50	54.83	0.00
3/26 17:53	20.92	12881650	851.2	1153.741	457.41	47.83	54.00	54.50	0.00
3/26 17:54	21.40	12988580	855.3	1153.886	459.54	44.00	54.83	53.33	0.00
3/26 17:55	20.83	13081870	844.6	1153.991	453.78	46.67	53.67	54.67	0.00
3/26 17:56	21.50	12849100	837.3	1154.797	449.55	49.33	53.00	54.67	0.00
3/26 17:57	20.47	13017690	841.3	1155.282	451.51	49.17	49.33	54.33	0.00
3/26 17:58	20.31	13231590	831.3	1155.023	446.25	47.17	42.50	54.83	0.00
3/26 17:59	21.36	12872010	831.6	1154.696	446.54	48.83	48.17	54.83	0.00
3/26 18:00	21.74	12994150	842.1	1154.784	452.10	46.33	50.67	54.67	0.00
3/26 18:01	19.15	13360390	842.0	1154.626	452.15	43.17	50.00	54.17	0.00
3/26 18:02	21.06	13044770	880.5	1154.253	472.96	47.33	48.67	54.17	0.00
3/26 18:03	20.75	13218960	893.4	1152.214	480.73	40.00	45.33	53.00	0.00
3/26 18:04	21.37	12930330	891.0	1150.490	480.14	47.67	43.17	54.67	0.00
3/26 18:05	20.13	13131530	901.0	1149.199	486.12	48.50	46.17	54.83	0.00
3/26 18:06	19.74	13319820	914.5	1147.726	494.03	47.67	53.67	53.33	0.00
3/26 18:07	21.32	12996440	918.0	1146.507	496.44	48.17	46.50	54.50	0.00
3/26 18:08	21.18	13019570	905.9	1147.151	489.62	46.50	51.83	55.00	0.00
3/26 18:09	21.10	12972050	894.5	1148.710	482.82	45.33	47.50	51.83	0.00
3/26 18:10	23.15	12757400	890.0	1151.560	479.18	48.50	53.00	54.83	0.00
3/26 18:11	21.10	13160580	879.6	1154.543	472.37	44.83	54.67	55.17	0.00
3/26 18:12	20.69	13228970	880.1	1156.526	471.80	49.67	54.50	54.67	0.00
3/26 18:13	21.22	12956770	872.6	1156.416	467.82	52.67	49.67	54.67	0.00
3/26 18:14	22.00	12831140	856.9	1156.162	459.54	45.33	48.83	54.83	0.00
3/26 18:15	21.81	12926160	864.4	1155.682	463.72	50.83	44.50	54.50	0.00
3/26 18:16	22.29	12909040	873.4	1155.129	468.77	48.67	40.83	54.67	0.00
3/26 18:17	21.26	12895470	876.8	1155.286	470.55	45.17	48.50	54.67	0.00
3/26 18:18	20.74	13041100	880.1	1155.356	472.28	48.33	52.00	54.67	0.00
3/26 18:19	21.15	13157670	880.1	1154.767	472.54	44.00	52.33	54.83	0.00
3/26 18:20	21.76	12995300	881.2	1153.955	473.43	47.17	54.50	55.00	0.00
3/26 18:21	20.93	13071640	875.7	1152.310	471.19	47.00	49.00	54.67	0.00
3/26 18:22	21.44	12926810	886.4	1150.883	477.54	52.00	51.50	53.83	0.00
3/26 18:23	21.49	12793200	893.8	1149.955	481.91	49.83	53.50	54.17	0.00
3/26 18:24	19.91	13114760	893.7	1149.137	482.17	51.17	52.17	54.83	0.00

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min
3/26 18:25	22.41	12764570	899.4	1149.239	485.21	46.67	52.83	54.67	0.00
3/26 18:26	21.58	12963290	885.0	1150.114	477.10	52.50	54.33	54.67	0.00
3/26 18:27	21.51	12850990	845.6	1152.256	455.01	42.83	48.50	54.67	0.00
3/26 18:28	22.31	12842620	856.1	1155.559	459.31	44.50	36.33	54.67	0.00
3/26 18:29	21.01	13062010	860.4	1158.257	460.56	50.33	38.17	54.67	0.00
3/26 18:30	21.31	13012400	877.1	1158.629	469.33	49.17	47.67	54.67	0.00
3/26 18:31	22.03	12891570	876.4	1157.705	469.33	42.50	46.67	54.67	0.00
3/26 18:32	21.32	12882100	867.0	1156.711	464.74	47.67	47.00	54.50	0.00
3/26 18:33	20.82	13149620	854.9	1154.605	459.09	46.17	45.33	54.67	0.00
3/26 18:34	21.42	13171370	863.9	1151.999	464.94	46.33	46.67	53.00	0.00
3/26 18:35	22.37	12894870	959.1	1150.386	516.89	45.67	50.50	54.67	0.00
3/26 18:36	22.01	13073380	992.2	1146.720	536.46	43.83	47.17	54.83	0.00
3/26 18:37	22.46	12993480	945.1	1142.960	512.69	42.17	48.33	53.83	0.00
3/26 18:38	22.63	12600500	919.8	1143.173	498.86	44.33	54.00	51.33	0.00
3/26 18:39	21.81	13160550	902.9	1146.086	488.47	48.83	51.00	51.50	0.00
3/26 18:40	21.45	13282930	893.9	1151.707	481.24	50.50	52.83	53.67	0.00
3/26 18:41	20.84	13145390	881.6	1157.255	472.34	47.17	53.67	55.00	0.00
3/26 18:42	22.40	13012480	851.3	1161.422	454.44	42.67	53.17	54.33	0.00
3/26 18:43	21.06	13305090	800.2	1164.070	426.22	51.00	52.67	54.33	0.00
3/26 18:44	21.92	13121010	763.3	1166.376	405.76	47.50	45.17	51.67	0.00
3/26 18:45	20.87	13573700	757.9	1168.308	402.21	47.67	45.00	50.17	0.00
3/26 18:46	21.82	13424560	798.2	1168.397	423.58	44.00	50.33	54.83	0.00
3/26 18:47	20.99	13823550	823.2	1165.533	437.90	48.67	52.33	54.67	0.00
3/26 18:48	22.30	13779770	853.6	1160.725	455.94	42.50	51.67	55.00	0.00
3/26 18:49	21.28	13885520	896.8	1155.394	481.22	47.83	51.17	54.50	0.00
3/26 18:50	22.19	13649640	875.1	1149.006	472.18	46.83	52.67	54.50	0.00
3/26 18:51	23.15	13529520	830.6	1145.219	449.67	42.33	51.50	54.33	0.00
3/26 18:52	24.09	13246850	732.9	1143.066	397.50	45.50	47.00	54.83	0.00
3/26 18:53	25.54	13209950	704.4	1143.312	382.00	46.33	49.67	54.67	0.00
3/26 18:54	29.39	12231230	784.3	1150.950	422.49	47.17	53.67	55.00	0.00
3/26 18:55	20.78	13579540	857.9	1159.669	458.69	43.50	54.50	54.50	0.00
3/26 18:56	23.16	13277510	890.2	1160.642	475.55	51.17	54.67	55.00	0.00
3/26 18:57	22.75	13268590	848.8	1155.024	455.63	53.17	54.50	55.00	0.00
3/26 18:58	23.41	13154300	872.2	1149.392	470.48	48.50	54.67	54.67	0.00
3/26 18:59	21.42	13489450	878.3	1146.983	474.76	48.33	53.67	53.83	0.00

Timestamp	Stack Moisture % 1-Min	Stack Flow dscf/hr 1-Min	Heat Input Rate mmBtu/hr 1-Min	Net Enthalpy (Btu/lb) (For Calc) 1-Min	Steam Production Rate- 1-Min klb/hr	Secondary Voltage 1 - 1-Min	Secondary Voltage 2 - 1-Min	Secondary Voltage 3 - 1-Min	Secondary Voltage 4 - 1-Min
3/26 19:00	23.36	13231620	886.9	1146.613	479.58	51.33	44.00	54.67	0.00
3/26 19:01	22.22	13161390	911.2	1147.668	492.24	50.67	48.17	54.67	0.00
3/26 19:02	22.09	13235820	937.6	1147.725	506.51	48.00	40.17	55.00	0.00
3/26 19:03	23.70	12957810	935.4	1147.882	505.23	47.83	44.67	54.83	0.00
3/26 19:04	21.91	13315870	881.7	1149.248	475.64	50.83	51.50	54.67	0.00
3/26 19:05	21.16	13140240	798.9	1151.423	430.17	52.50	53.50	54.00	0.00
Average (all)	21.24	13169860	867.6	1154.521	466.00	46.84	50.21	54.43	0.00
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	0.00	12231230	704.4	1142.960	382.00	40.00	36.33	50.17	0.00
Maximum (all)	29.39	16608390	992.2	1168.397	536.46	53.17	54.83	55.17	0.00
Average (valid values only)	21.24	13169860	867.6	1154.521	466.00	46.84	50.21	54.43	0.00
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	107	107	107	107	107	107	107	107	107

<25> = Backflush

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 5:19 PM thru 3/26/2005 7:05 PM

Timestamp	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min
3/26 17:19	0.00	155.34	312.50	462.50	529.17	0.00	0.00	1304.17	62.5
3/26 17:20	0.00	149.83	157.50	415.00	506.67	0.00	0.00	1079.17	63.4
3/26 17:21	0.00	155.83	246.67	515.00	515.83	0.00	0.00	1277.50	58.0
3/26 17:22	0.00	155.17	178.33	492.50	500.00	0.00	0.00	1170.83	51.9
3/26 17:23	0.00	154.01	179.17	476.67	500.00	0.00	0.00	1155.84	42.1
3/26 17:24	0.00	151.83	171.67	437.50	508.33	0.00	0.00	1117.50	31.2
3/26 17:25	0.00	151.17	144.17	386.67	497.50	0.00	0.00	1028.34	24.8
3/26 17:26	0.00	146.50	153.33	264.17	482.50	0.00	0.00	900.00	23.4
3/26 17:27	0.00	146.83	222.50	223.33	484.17	0.00	0.00	930.00	21.7
3/26 17:28	0.00	154.00	139.17	436.67	499.17	0.00	0.00	1075.01	24.3
3/26 17:29	0.00	155.01	161.67	455.83	499.17	0.00	0.00	1116.67	26.4
3/26 17:30	0.00	156.66	232.50	460.00	502.50	0.00	0.00	1195.00	31.6
3/26 17:31	0.00	155.50	210.00	451.67	488.33	0.00	0.00	1150.00	34.9
3/26 17:32	0.00	151.16	93.33	460.83	502.50	0.00	0.00	1056.66	38.6
3/26 17:33	0.00	150.00	157.50	370.00	499.17	0.00	0.00	1026.67	40.5
3/26 17:34	0.00	145.17	115.83	315.00	490.00	0.00	0.00	920.83	44.7
3/26 17:35	0.00	149.84	175.83	317.50	488.33	0.00	0.00	981.66	44.7
3/26 17:36	0.00	148.00	160.83	293.33	450.83	0.00	0.00	904.99	41.9
3/26 17:37	0.00	148.99	84.17	384.17	477.50	0.00	0.00	945.84	39.5
3/26 17:38	0.00	150.33	115.00	379.17	485.00	0.00	0.00	979.17	35.6
3/26 17:39	0.00	157.33	210.83	453.33	496.67	0.00	0.00	1160.83	30.9
3/26 17:40	0.00	151.33	186.67	370.83	495.00	0.00	0.00	1052.50	26.1
3/26 17:41	0.00	153.50	194.17	415.83	493.33	0.00	0.00	1103.33	22.3
3/26 17:42	0.00	144.50	226.67	190.00	475.83	0.00	0.00	892.50	20.9
3/26 17:43	0.00	148.17	129.17	317.50	465.00	0.00	0.00	911.67	21.4
3/26 17:44	0.00	152.33	205.00	324.17	472.50	0.00	0.00	1001.67	23.3
3/26 17:45	0.00	153.33	145.83	376.67	485.83	0.00	0.00	1008.33	28.8
3/26 17:46	0.00	151.00	180.00	363.33	490.83	0.00	0.00	1034.16	34.7
3/26 17:47	0.00	153.50	105.00	435.83	490.00	0.00	0.00	1030.83	41.2
3/26 17:48	0.00	155.33	178.33	487.50	508.33	0.00	0.00	1174.16	45.8
3/26 17:49	0.00	157.49	249.17	440.83	502.50	0.00	0.00	1192.50	48.4
3/26 17:50	0.00	142.00	143.33	197.50	477.50	0.00	0.00	818.33	51.1

Timestamp	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min
3/26 17:51	0.00	149.00	199.17	241.67	490.83	0.00	0.00	931.67	50.0
3/26 17:52	0.00	158.50	250.83	495.83	518.33	0.00	0.00	1264.99	43.4
3/26 17:53	0.00	156.33	227.50	461.67	503.33	0.00	0.00	1192.50	38.1
3/26 17:54	0.00	152.16	137.50	454.17	455.83	0.00	0.00	1047.50	31.2
3/26 17:55	0.00	155.01	193.33	441.67	500.83	0.00	0.00	1135.83	24.6
3/26 17:56	0.00	157.00	283.33	468.33	513.33	0.00	0.00	1264.99	21.8
3/26 17:57	0.00	152.83	256.67	370.83	502.50	0.00	0.00	1130.00	21.5
3/26 17:58	0.00	144.50	222.50	184.17	483.33	0.00	0.00	890.00	23.2
3/26 17:59	0.00	151.83	229.17	299.17	502.50	0.00	0.00	1030.84	29.8
3/26 18:00	0.00	151.67	156.67	347.50	483.33	0.00	0.00	987.50	38.2
3/26 18:01	0.00	147.34	140.83	312.50	462.50	0.00	0.00	915.83	44.4
3/26 18:02	0.00	150.17	222.50	321.67	485.00	0.00	0.00	1029.17	53.6
3/26 18:03	0.00	138.33	94.17	215.00	418.33	0.00	0.00	727.50	58.5
3/26 18:04	0.00	145.51	199.17	187.50	471.67	0.00	0.00	858.34	59.5
3/26 18:05	0.00	149.50	202.50	270.00	481.67	0.00	0.00	954.17	53.6
3/26 18:06	0.00	154.67	194.17	426.67	467.50	0.00	0.00	1088.34	44.9
3/26 18:07	0.00	149.17	193.33	267.50	479.17	0.00	0.00	940.00	37.2
3/26 18:08	0.00	153.33	173.33	356.67	489.17	0.00	0.00	1019.17	26.7
3/26 18:09	0.00	144.66	145.00	288.33	410.83	0.00	0.00	844.16	24.0
3/26 18:10	0.00	156.33	171.67	420.00	502.50	0.00	0.00	1094.17	22.4
3/26 18:11	0.00	154.67	146.67	459.17	505.83	0.00	0.00	1111.67	22.2
3/26 18:12	0.00	158.84	281.67	505.00	504.17	0.00	0.00	1290.84	24.0
3/26 18:13	0.00	157.01	371.67	402.50	504.17	0.00	0.00	1278.34	28.4
3/26 18:14	0.00	148.99	176.67	321.67	490.83	0.00	0.00	989.17	32.4
3/26 18:15	0.00	149.83	275.00	265.00	482.50	0.00	0.00	1022.50	37.4
3/26 18:16	0.00	144.17	208.33	182.50	472.50	0.00	0.00	863.33	43.0
3/26 18:17	0.00	148.34	167.50	311.67	494.17	0.00	0.00	973.34	46.2
3/26 18:18	0.00	155.00	226.67	392.50	500.00	0.00	0.00	1119.17	46.8
3/26 18:19	0.00	151.16	145.83	364.17	490.00	0.00	0.00	1000.00	45.9
3/26 18:20	0.00	156.67	204.17	476.67	512.50	0.00	0.00	1193.34	44.1
3/26 18:21	0.00	150.67	195.00	320.00	501.67	0.00	0.00	1016.67	39.5
3/26 18:22	0.00	157.33	325.83	405.00	491.67	0.00	0.00	1222.50	32.4
3/26 18:23	0.00	157.50	247.50	434.17	500.83	0.00	0.00	1182.50	26.3
3/26 18:24	0.00	158.17	288.33	418.33	511.67	0.00	0.00	1218.33	24.0
3/26 18:25	0.00	154.17	210.00	410.00	512.50	0.00	0.00	1132.50	23.1
3/26 18:26	0.00	161.50	348.33	489.17	508.33	0.00	0.00	1345.83	21.7

Timestamp	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min
3/26 18:27	0.00	146.00	157.50	324.17	475.00	0.00	0.00	956.67	22.2
3/26 18:28	0.00	135.50	129.17	95.83	446.67	0.00	0.00	671.67	26.2
3/26 18:29	0.00	143.17	307.50	119.17	490.00	0.00	0.00	916.67	31.7
3/26 18:30	0.00	151.51	222.50	285.00	506.67	0.00	0.00	1014.17	37.2
3/26 18:31	0.00	143.84	93.33	210.00	474.17	0.00	0.00	777.50	41.5
3/26 18:32	0.00	149.17	167.50	255.83	488.33	0.00	0.00	911.66	45.5
3/26 18:33	0.00	146.17	185.00	219.17	487.50	0.00	0.00	891.67	48.8
3/26 18:34	0.00	146.00	131.67	224.17	417.50	0.00	0.00	773.34	47.8
3/26 18:35	0.00	150.84	109.17	256.67	451.67	0.00	0.00	817.51	44.2
3/26 18:36	0.00	145.83	108.33	206.67	442.50	0.00	0.00	757.50	34.2
3/26 18:37	0.00	144.33	81.67	218.33	437.50	0.00	0.00	737.50	25.8
3/26 18:38	0.00	149.66	98.33	335.83	382.50	0.00	0.00	816.66	24.1
3/26 18:39	0.00	151.33	160.00	305.83	401.67	0.00	0.00	867.50	23.0
3/26 18:40	0.00	157.00	206.67	400.83	457.50	0.00	0.00	1065.00	21.9
3/26 18:41	0.00	155.84	132.50	376.67	475.00	0.00	0.00	984.17	21.8
3/26 18:42	0.00	150.17	90.83	341.67	455.00	0.00	0.00	887.50	20.8
3/26 18:43	0.00	158.00	215.00	400.00	482.50	0.00	0.00	1097.50	18.8
3/26 18:44	0.00	144.34	171.67	242.50	402.50	0.00	0.00	816.67	19.1
3/26 18:45	0.00	142.84	155.00	194.17	358.33	0.00	0.00	707.50	21.0
3/26 18:46	0.00	149.16	120.00	266.67	462.50	0.00	0.00	849.17	27.4
3/26 18:47	0.00	155.67	175.00	343.33	472.50	0.00	0.00	990.83	35.4
3/26 18:48	0.00	149.17	93.33	305.00	460.83	0.00	0.00	859.16	38.9
3/26 18:49	0.00	153.50	137.50	330.00	470.83	0.00	0.00	938.33	45.8
3/26 18:50	0.00	154.00	140.83	338.33	459.17	0.00	0.00	938.33	42.7
3/26 18:51	0.00	148.16	81.67	293.33	452.50	0.00	0.00	827.50	35.2
3/26 18:52	0.00	147.33	118.33	217.50	457.50	0.00	0.00	793.33	23.9
3/26 18:53	0.00	150.67	118.33	261.67	471.67	0.00	0.00	851.67	17.3
3/26 18:54	0.00	155.84	129.17	360.83	462.50	0.00	0.00	952.50	17.9
3/26 18:55	0.00	152.50	90.83	360.00	460.00	0.00	0.00	910.83	19.4
3/26 18:56	0.00	160.84	236.67	463.33	494.17	0.00	0.00	1194.17	21.3
3/26 18:57	0.00	162.67	289.17	478.33	496.67	0.00	0.00	1264.17	22.3
3/26 18:58	0.00	157.84	160.83	420.83	477.50	0.00	0.00	1059.16	25.7
3/26 18:59	0.00	155.83	142.50	380.00	458.33	0.00	0.00	980.83	26.2
3/26 19:00	0.00	150.00	260.00	205.00	470.00	0.00	0.00	935.00	25.4
3/26 19:01	0.00	153.51	234.17	275.00	476.67	0.00	0.00	985.84	23.5
3/26 19:02	0.00	143.17	196.67	134.17	455.83	0.00	0.00	786.67	22.8

Timestamp	Secondary Voltage 5 - 1-Min	Secondary Voltage Total 1-Min	Secondary Current 1 - 1-Min	Secondary Current 2 - 1-Min	Secondary Current 3 - 1-Min	Secondary Current 4 - 1-Min	Secondary Current 5 - 1-Min	Secondary Current Total 1-Min	UREA Injection gal/hr 1-Min
3/26 19:03	0.00	147.33	165.00	176.67	448.33	0.00	0.00	790.00	22.9
3/26 19:04	0.00	157.00	236.67	334.17	485.00	0.00	0.00	1055.84	22.0
3/26 19:05	0.00	160.00	311.67	430.00	491.67	0.00	0.00	1233.34	19.6
Average (all)	0.00	151.48	183.55	343.42	479.28	0.00	0.00	1006.25	33.4
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	0.00	135.50	81.67	95.83	358.33	0.00	0.00	671.67	17.3
Maximum (all)	0.00	162.67	371.67	515.00	529.17	0.00	0.00	1345.83	63.4
Average (valid values only)	0.00	151.48	183.55	343.42	479.28	0.00	0.00	1006.25	33.4
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	107	107	107	107	107	107	107	107	107

<25> = Backflush

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 5:19 PM thru 3/26/2005 7:05 PM

Timestamp	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min	Secondary Power Input 4 - 1-Min
3/26 17:19	2.64	2.59	766.1	264.0	269.1	154.50	233.17	289.67	0.00
3/26 17:20	2.64	2.59	765.1	264.2	268.8	72.17	221.83	278.00	0.00
3/26 17:21	2.63	2.59	761.2	264.2	268.6	121.00	279.50	283.00	0.00
3/26 17:22	2.64	2.60	757.3	264.0	268.7	85.67	269.33	272.33	0.00
3/26 17:23	2.63	2.59	756.6	264.0	268.7	87.67	260.50	273.17	0.00
3/26 17:24	2.64	2.59	759.0	263.8	268.6	82.50	233.50	279.83	0.00
3/26 17:25	2.64	2.60	763.8	263.7	268.7	64.67	204.83	273.83	0.00
3/26 17:26	2.63	2.59	769.1	264.0	268.4	71.67	132.33	264.83	0.00
3/26 17:27	2.64	2.59	772.8	264.2	268.1	108.83	106.00	264.00	0.00
3/26 17:28	2.64	2.60	773.5	264.5	267.9	64.50	237.50	274.50	0.00
3/26 17:29	2.64	2.59	772.4	264.5	267.7	77.83	249.17	272.00	0.00
3/26 17:30	2.64	2.59	770.7	264.3	267.5	117.67	247.33	275.50	0.00
3/26 17:31	2.64	2.59	769.9	264.1	267.5	103.00	241.83	265.67	0.00
3/26 17:32	2.63	2.60	770.8	263.9	267.2	39.83	252.67	275.33	0.00
3/26 17:33	2.63	2.60	773.3	264.0	267.1	73.17	190.67	272.83	0.00
3/26 17:34	2.63	2.59	776.6	264.2	266.9	53.00	157.83	268.00	0.00
3/26 17:35	2.64	2.59	778.5	264.1	266.6	84.17	162.17	267.67	0.00
3/26 17:36	2.63	2.60	778.8	264.2	266.3	76.17	146.00	243.50	0.00
3/26 17:37	2.64	2.59	778.5	264.3	266.3	35.67	205.33	262.00	0.00
3/26 17:38	2.64	2.60	777.7	264.3	266.0	52.33	202.00	266.17	0.00
3/26 17:39	2.64	2.60	776.4	264.3	266.3	105.33	245.33	273.50	0.00
3/26 17:40	2.64	2.59	774.7	264.3	266.3	90.83	193.00	271.33	0.00
3/26 17:41	2.64	2.59	771.1	264.4	266.5	95.33	219.83	269.00	0.00
3/26 17:42	2.63	2.60	768.0	264.3	266.6	112.67	92.50	260.83	0.00
3/26 17:43	2.64	2.60	767.7	263.8	266.7	61.50	162.50	252.00	0.00
3/26 17:44	2.64	2.59	771.5	263.7	266.9	101.83	164.50	255.67	0.00
3/26 17:45	2.63	2.59	776.6	264.0	266.9	68.83	201.00	267.33	0.00
3/26 17:46	2.63	2.59	778.4	264.3	266.7	89.50	191.33	266.33	0.00
3/26 17:47	2.64	2.59	775.9	264.3	266.8	46.67	239.33	269.67	0.00
3/26 17:48	2.64	2.59	771.3	264.3	266.8	84.33	266.67	275.17	0.00
3/26 17:49	2.64	2.59	767.3	264.4	267.2	128.67	237.50	275.67	0.00
3/26 17:50	2.63	2.60	765.6	264.5	266.9	68.33	92.17	261.17	0.00

Timestamp	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min	Secondary Power Input 4 - 1-Min
3/26 17:51	2.63	2.60	765.4	264.6	267.1	97.17	113.50	269.00	0.00
3/26 17:52	2.64	2.59	766.4	264.7	267.1	139.67	270.67	284.67	0.00
3/26 17:53	2.64	2.58	767.1	264.8	267.2	113.00	250.17	274.33	0.00
3/26 17:54	2.64	2.59	767.7	264.9	267.2	64.83	249.00	243.83	0.00
3/26 17:55	2.64	2.59	768.6	265.1	267.3	93.17	234.00	274.00	0.00
3/26 17:56	2.64	2.59	770.3	265.0	267.2	140.83	251.17	280.83	0.00
3/26 17:57	2.64	2.59	772.0	265.3	267.2	129.33	192.00	272.83	0.00
3/26 17:58	2.64	2.59	772.4	265.5	267.1	108.33	81.50	265.17	0.00
3/26 17:59	2.64	2.60	772.5	265.6	267.2	113.67	145.83	277.67	0.00
3/26 18:00	2.64	2.59	773.3	265.7	267.1	73.67	178.50	264.17	0.00
3/26 18:01	2.64	2.59	773.9	265.9	267.2	67.33	159.50	251.33	0.00
3/26 18:02	2.63	2.59	773.4	266.0	267.2	111.17	161.50	263.67	0.00
3/26 18:03	2.63	2.59	770.4	266.3	267.2	42.67	107.17	222.50	0.00
3/26 18:04	2.64	2.59	767.0	266.0	267.4	99.33	86.17	257.83	0.00
3/26 18:05	2.64	2.59	764.2	265.8	267.7	99.00	136.00	264.33	0.00
3/26 18:06	2.64	2.60	761.1	265.9	267.8	97.17	231.33	250.67	0.00
3/26 18:07	2.64	2.60	758.7	266.1	267.8	95.17	133.83	261.17	0.00
3/26 18:08	2.64	2.59	759.1	266.0	267.8	87.00	187.17	269.17	0.00
3/26 18:09	2.63	2.59	761.2	265.8	267.7	69.17	147.67	216.33	0.00
3/26 18:10	2.64	2.59	766.5	266.0	267.4	83.00	223.67	275.67	0.00
3/26 18:11	2.64	2.60	771.9	266.1	267.2	71.33	251.17	279.00	0.00
3/26 18:12	2.64	2.60	775.3	266.1	267.2	144.83	275.67	277.33	0.00
3/26 18:13	2.64	2.60	775.3	266.2	267.2	196.17	209.67	275.50	0.00
3/26 18:14	2.64	2.59	774.8	266.0	266.9	88.00	162.83	269.17	0.00
3/26 18:15	2.64	2.60	774.2	266.1	266.6	144.17	130.00	263.00	0.00
3/26 18:16	2.63	2.58	773.6	266.2	266.4	103.00	84.33	258.00	0.00
3/26 18:17	2.63	2.60	774.4	266.3	266.4	80.33	157.50	270.17	0.00
3/26 18:18	2.64	2.59	774.6	266.2	266.6	114.33	208.17	273.50	0.00
3/26 18:19	2.64	2.59	773.7	266.1	266.6	69.67	191.33	268.67	0.00
3/26 18:20	2.64	2.59	772.0	265.9	266.6	97.83	260.17	282.00	0.00
3/26 18:21	2.64	2.59	769.2	265.9	266.6	96.17	162.00	274.17	0.00
3/26 18:22	2.64	2.59	766.6	265.9	266.5	170.33	212.33	266.00	0.00
3/26 18:23	2.63	2.59	765.2	266.2	266.7	126.67	233.67	272.67	0.00
3/26 18:24	2.63	2.59	763.3	266.2	266.6	148.67	220.50	280.00	0.00
3/26 18:25	2.64	2.59	762.1	265.7	266.8	101.33	216.83	280.00	0.00
3/26 18:26	2.63	2.60	763.1	265.5	266.7	183.00	266.00	278.00	0.00

Timestamp	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min	Secondary Power Input 4 - 1-Min
3/26 18:27	2.64	2.59	766.8	265.2	266.8	78.50	162.17	259.83	0.00
3/26 18:28	2.65	2.60	772.6	265.1	266.7	60.00	39.00	244.33	0.00
3/26 18:29	2.64	2.59	778.4	265.5	266.2	158.50	47.67	268.00	0.00
3/26 18:30	2.64	2.60	780.2	266.0	266.2	112.17	139.33	276.83	0.00
3/26 18:31	2.64	2.60	779.5	266.2	266.4	41.83	92.67	258.67	0.00
3/26 18:32	2.64	2.59	777.7	265.9	266.8	79.83	124.67	266.17	0.00
3/26 18:33	2.64	2.59	774.1	265.8	266.8	92.50	103.83	266.67	0.00
3/26 18:34	2.64	2.60	770.0	266.0	266.8	62.50	115.83	222.67	0.00
3/26 18:35	2.64	2.60	766.8	266.6	266.5	52.17	133.00	246.17	0.00
3/26 18:36	2.64	2.59	760.8	267.8	266.7	51.50	106.83	242.67	0.00
3/26 18:37	2.63	2.59	751.9	267.2	267.2	35.67	108.67	235.67	0.00
3/26 18:38	2.64	2.59	749.3	266.0	267.5	47.00	181.50	200.50	0.00
3/26 18:39	2.64	2.59	753.5	265.9	267.4	81.67	157.33	211.67	0.00
3/26 18:40	2.64	2.59	763.1	266.0	267.2	105.67	213.33	246.50	0.00
3/26 18:41	2.64	2.59	772.8	266.1	266.9	64.17	202.67	261.33	0.00
3/26 18:42	2.64	2.59	780.2	265.9	266.2	42.50	181.83	247.33	0.00
3/26 18:43	2.63	2.59	785.4	265.7	265.4	109.67	213.33	262.17	0.00
3/26 18:44	2.64	2.59	790.2	265.4	263.1	85.17	124.00	214.33	0.00
3/26 18:45	2.65	2.59	795.1	265.6	246.7	76.33	91.67	185.33	0.00
3/26 18:46	2.64	2.59	796.4	265.9	251.6	58.67	135.67	253.67	0.00
3/26 18:47	2.65	2.59	793.5	266.7	243.8	87.00	179.33	258.33	0.00
3/26 18:48	2.63	2.59	786.5	267.2	236.9	44.00	161.33	253.50	0.00
3/26 18:49	2.63	2.59	776.2	266.9	226.4	66.50	173.17	257.17	0.00
3/26 18:50	2.63	2.59	764.8	266.8	234.0	70.33	179.33	250.33	0.00
3/26 18:51	2.64	2.59	756.3	265.7	235.1	36.33	153.00	246.00	0.00
3/26 18:52	2.64	2.59	751.9	265.4	241.3	55.33	104.50	251.17	0.00
3/26 18:53	2.65	2.59	752.1	265.2	248.3	56.83	132.50	257.83	0.00
3/26 18:54	2.64	2.60	767.0	265.5	245.5	62.33	194.17	254.33	0.00
3/26 18:55	2.64	2.59	784.1	266.4	247.7	41.50	196.50	251.33	0.00
3/26 18:56	2.64	2.59	787.5	267.4	249.0	121.67	253.50	271.83	0.00
3/26 18:57	2.65	2.60	775.6	266.1	251.2	153.83	259.00	273.50	0.00
3/26 18:58	2.64	2.60	763.4	264.9	251.3	79.50	230.17	261.17	0.00
3/26 18:59	2.64	2.59	757.8	264.4	252.0	69.50	205.00	247.33	0.00
3/26 19:00	2.64	2.59	756.2	264.2	256.5	135.33	97.50	256.83	0.00
3/26 19:01	2.65	2.59	756.9	264.1	259.7	119.00	136.50	260.50	0.00
3/26 19:02	2.64	2.60	756.0	264.4	260.5	99.17	58.50	250.83	0.00

Timestamp	Water Flow Rate 1- 1-Min kgal/hr	Water Flow Rate 2- 1-Min kgal/hr	Steam Temp 1-Min	Feed Water Temp 1-Min	Stack Temp °F - 1-Min	Secondary Power Input 1 - 1-Min	Secondary Power Input 2 - 1-Min	Secondary Power Input 3 - 1-Min	Secondary Power Input 4 - 1-Min
3/26 19:03	2.64	2.60	754.8	264.2	261.0	82.50	82.50	245.17	0.00
3/26 19:04	2.64	2.59	755.9	263.7	261.6	121.17	173.83	265.33	0.00
3/26 19:05	2.64	2.59	759.5	263.5	261.6	164.83	232.33	266.17	0.00
Average (all)	2.64	2.59	769.7	265.3	263.4	90.68	179.43	261.45	0.00
Total (all)	--	--	--	--	--	--	--	--	--
Minimum (all)	2.63	2.58	749.3	263.5	226.4	35.67	39.00	185.33	0.00
Maximum (all)	2.65	2.60	796.4	267.8	269.1	196.17	279.50	289.67	0.00
Average (valid values only)	2.64	2.59	769.7	265.3	263.4	90.68	179.43	261.45	0.00
Total (valid values only)	--	--	--	--	--	--	--	--	--
Count (valid values only)	107	107	107	107	107	107	107	107	107

<25> = Backflush

CeDAR 1-Minute Data

US SUGAR CORP - CLEWISTON

Data for 3/26/2005 5:19 PM thru 3/26/2005 7:05 PM

Timestamp	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 17:19	0.00	677.34	667.58	682.28	1049.87	7.80	8.06
3/26 17:20	0.00	572.00	659.35	674.05	1073.61	7.76	7.98
3/26 17:21	0.00	683.50	649.89	664.59	1054.81	7.76	7.98
3/26 17:22	0.00	627.33	639.52	654.22	1040.36	7.78	7.95
3/26 17:23	0.00	621.34	627.90	642.60	1037.07	7.82	8.05
3/26 17:24	0.00	595.83	618.67	633.37	1006.30	7.81	8.01
3/26 17:25	0.00	543.33	612.18	626.88	994.29	7.87	8.06
3/26 17:26	0.00	468.83	604.63	619.33	1008.25	7.66	7.89
3/26 17:27	0.00	478.83	598.09	612.79	1025.90	7.69	7.91
3/26 17:28	0.00	576.50	588.28	602.98	1056.38	7.75	7.97
3/26 17:29	0.00	599.00	580.54	595.24	1056.42	7.65	7.86
3/26 17:30	0.00	640.50	574.81	589.51	1030.03	7.65	7.81
3/26 17:31	0.00	610.50	571.60	586.30	1009.06	7.64	7.82
3/26 17:32	0.00	567.83	569.84	584.54	1008.54	7.60	7.86
3/26 17:33	0.00	536.67	568.48	583.18	1025.14	7.59	7.82
3/26 17:34	0.00	478.83	569.69	584.39	1041.33	7.61	7.79
3/26 17:35	0.00	514.01	572.93	587.63	1043.55	7.52	7.75
3/26 17:36	0.00	465.67	574.58	589.28	1063.56	7.63	7.84
3/26 17:37	0.00	503.00	578.23	592.93	1067.08	7.65	7.84
3/26 17:38	0.00	520.50	581.21	595.91	1068.65	7.65	7.85
3/26 17:39	0.00	624.16	584.48	599.18	1070.31	7.67	7.87
3/26 17:40	0.00	555.16	585.11	599.81	1071.11	7.60	7.79
3/26 17:41	0.00	584.16	582.76	597.46	1082.12	7.58	7.77
3/26 17:42	0.00	466.00	586.63	601.33	1031.84	7.66	7.89
3/26 17:43	0.00	476.00	593.63	608.33	1005.84	7.56	7.84
3/26 17:44	0.00	522.00	600.96	615.66	1025.45	7.68	7.88
3/26 17:45	0.00	537.16	606.87	621.57	1062.81	7.56	7.76
3/26 17:46	0.00	547.16	611.40	626.10	1073.67	7.56	7.78
3/26 17:47	0.00	555.67	615.22	629.92	1067.65	7.53	7.78
3/26 17:48	0.00	626.17	618.73	633.43	1053.84	7.59	7.83
3/26 17:49	0.00	641.84	622.00	636.70	1061.14	7.60	7.82
3/26 17:50	0.00	421.67	623.81	638.51	1065.69	7.62	7.87

Timestamp	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 17:51	0.00	479.67	624.56	639.26	1064.96	7.64	7.85
3/26 17:52	0.00	695.01	625.83	640.53	1059.31	7.61	7.82
3/26 17:53	0.00	637.50	627.69	642.39	1045.75	7.62	7.82
3/26 17:54	0.00	557.66	629.38	644.08	1044.79	7.55	7.78
3/26 17:55	0.00	601.17	633.06	647.76	1039.46	7.62	7.83
3/26 17:56	0.00	672.83	638.58	653.28	1033.03	7.53	7.79
3/26 17:57	0.00	594.16	641.56	656.26	1056.42	7.47	7.74
3/26 17:58	0.00	455.00	646.93	661.63	1042.48	7.57	7.80
3/26 17:59	0.00	537.17	652.52	667.22	1052.03	7.62	7.86
3/26 18:00	0.00	516.34	657.78	672.48	1065.54	7.59	7.84
3/26 18:01	0.00	478.16	663.46	678.16	1065.95	7.58	7.81
3/26 18:02	0.00	536.34	662.95	677.65	1091.98	7.56	7.75
3/26 18:03	0.00	372.34	662.69	677.39	1085.99	7.62	7.85
3/26 18:04	0.00	443.33	665.01	679.71	1039.74	7.63	7.87
3/26 18:05	0.00	499.33	663.27	677.97	1037.76	7.56	7.78
3/26 18:06	0.00	579.17	655.13	669.83	1056.77	7.53	7.75
3/26 18:07	0.00	490.17	647.79	662.49	1049.05	7.63	7.83
3/26 18:08	0.00	543.34	641.79	656.49	1017.09	7.58	7.81
3/26 18:09	0.00	433.17	639.00	653.70	989.81	7.62	7.86
3/26 18:10	0.00	582.34	637.75	652.45	1007.15	7.55	7.77
3/26 18:11	0.00	601.50	637.20	651.90	1015.98	7.54	7.76
3/26 18:12	0.00	697.83	636.07	650.77	1031.00	7.53	7.75
3/26 18:13	0.00	681.34	636.03	650.73	1040.81	7.63	7.86
3/26 18:14	0.00	520.00	640.10	654.80	1020.14	7.52	7.73
3/26 18:15	0.00	537.17	640.64	655.34	1050.25	7.47	7.66
3/26 18:16	0.00	445.33	642.71	657.41	1071.50	7.55	7.80
3/26 18:17	0.00	508.00	646.54	661.24	1063.91	7.48	7.71
3/26 18:18	0.00	596.00	649.76	664.46	1051.83	7.49	7.73
3/26 18:19	0.00	529.67	653.61	668.31	1041.64	7.60	7.83
3/26 18:20	0.00	640.00	654.97	669.67	1043.28	7.43	7.69
3/26 18:21	0.00	532.34	655.92	670.62	1040.35	7.57	7.80
3/26 18:22	0.00	648.66	654.78	669.48	1053.46	7.54	7.79
3/26 18:23	0.00	633.01	650.64	665.34	1067.21	7.52	7.74
3/26 18:24	0.00	649.17	645.37	660.07	1062.58	7.59	7.85
3/26 18:25	0.00	598.16	640.87	655.57	1037.31	7.54	7.80
3/26 18:26	0.00	727.00	639.21	653.91	1010.21	7.56	7.78

Timestamp	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 18:27	0.00	500.50	645.21	659.91	968.72	7.55	7.78
3/26 18:28	0.00	343.33	647.47	662.17	992.77	7.60	7.83
3/26 18:29	0.00	474.17	650.28	664.98	1058.99	7.55	7.79
3/26 18:30	0.00	528.33	652.01	666.71	1081.29	7.63	7.87
3/26 18:31	0.00	393.17	658.39	673.09	1065.71	7.63	7.88
3/26 18:32	0.00	470.67	664.90	679.60	1033.66	7.60	7.82
3/26 18:33	0.00	463.00	668.52	683.22	1029.29	7.70	7.93
3/26 18:34	0.00	401.00	669.21	683.91	1051.04	7.78	8.02
3/26 18:35	0.00	431.34	651.32	666.02	1117.96	7.82	8.01
3/26 18:36	0.00	401.00	629.57	644.27	1117.48	7.79	8.00
3/26 18:37	0.00	380.01	617.63	632.33	1002.91	7.82	8.05
3/26 18:38	0.00	429.00	610.98	625.68	935.72	7.84	8.05
3/26 18:39	0.00	450.67	602.65	617.35	927.17	7.76	8.01
3/26 18:40	0.00	565.50	596.03	610.73	959.90	7.72	7.98
3/26 18:41	0.00	528.17	591.71	606.41	1006.58	7.78	8.01
3/26 18:42	0.00	471.66	595.58	610.28	989.50	7.78	7.99
3/26 18:43	0.00	585.17	605.67	620.37	979.10	7.85	8.04
3/26 18:44	0.00	423.50	620.95	635.65	958.70	7.91	8.03
3/26 18:45	0.00	353.33	633.82	648.52	1044.35	7.87	8.00
3/26 18:46	0.00	448.01	640.50	655.20	1103.34	7.93	8.07
3/26 18:47	0.00	524.66	647.86	662.56	1128.94	8.07	8.14
3/26 18:48	0.00	458.83	654.38	669.08	1108.23	8.02	8.08
3/26 18:49	0.00	496.84	651.47	666.17	1112.32	8.09	8.09
3/26 18:50	0.00	499.99	651.64	666.34	1068.78	8.15	8.16
3/26 18:51	0.00	435.33	654.97	669.67	963.83	8.00	8.03
3/26 18:52	0.00	411.00	654.53	669.23	928.75	8.20	8.23
3/26 18:53	0.00	447.16	656.30	671.00	935.90	8.76	8.81
3/26 18:54	0.00	510.83	667.00	681.70	1080.22	8.18	8.25
3/26 18:55	0.00	489.33	666.99	681.69	1133.71	8.00	8.13
3/26 18:56	0.00	647.00	663.40	678.10	1126.42	8.10	8.21
3/26 18:57	0.00	686.33	670.58	685.28	1021.65	8.17	8.27
3/26 18:58	0.00	570.84	670.35	685.05	1023.67	8.12	8.27
3/26 18:59	0.00	521.83	665.67	680.37	1062.35	8.13	8.33
3/26 19:00	0.00	489.66	659.40	674.10	1059.21	8.06	8.28
3/26 19:01	0.00	516.00	648.79	663.49	1073.72	8.04	8.29
3/26 19:02	0.00	408.50	631.08	645.78	1075.96	8.16	8.43

Timestamp	Secondary Power Input 5 - 1-Min	Secondary Power Input Total 1-Min	Steam Pressure - 1-Min	Steam Pressure PSIA- 1-Min	Feed Water Pressure - 1-Min	Pressure Drop 1 - Inches H2O - 1-Min	Pressure Drop 2 - Inches H2O - 1-Min
3/26 19:03	0.00	410.17	619.08	633.78	1034.37	8.05	8.35
3/26 19:04	0.00	560.33	615.47	630.17	959.49	7.99	8.30
3/26 19:05	0.00	663.33	617.09	631.79	931.67	7.91	8.21
Average (all)	0.00	531.56	630.83	645.53	1040.48	7.72	7.93
Total (all)	--	--	--	--	--	--	--
Minimum (all)	0.00	343.33	568.48	583.18	927.17	7.43	7.66
Maximum (all)	0.00	727.00	670.58	685.28	1133.71	8.76	8.81
Average (valid values only)	0.00	531.56	630.83	645.53	1040.48	7.72	7.93
Total (valid values only)	--	--	--	--	--	--	--
Count (valid values only)	107	107	107	107	107	107	107

<25> = Backflush