

FLORIDA ROCK INDUSTRIES INC

CEMENT GROUP / 4000 N.W. CR 235 / P.O. Box 459 / Newberry, FL 32669 / (352) 472-4722

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FEB 09 2001



BUREAU OF AIR REGULATION

February 7, 2001

Mr. Kirby B. Green, III
Deputy Secretary
FDEP
3900 Commonwealth Blvd., MS-47
Tallahassee, FL 32399-3000

Mr. Ernie Frye, Director
Northeast District
FDEP
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256

Re: Proposed Consent Order

Dear Messrs. Green and Frye:

On behalf of Florida Rock Industries, Inc., I would like to thank you and Department staff for invaluable assistance and guidance as Florida Rock worked through and solved its problems associated with last years anomalous VOC emissions. It is my desire to conclude all issues related to the proposed consent order as soon as possible. To that end, and in conjunction with the re-draft of the consent order previously provided to the Department by our attorneys, we hereby submit this counteroffer for your consideration.

First, due to the relatively minor nature of the VOC emissions at issue, the total amount of natural and man-made VOC emissions in Alachua County, the anomalous nature of the VOC emissions, and the lost production and great expense borne by Florida Rock in solving the unanticipated emission problems, we believe that any monetary penalty should be a minor one. As such, we propose a penalty and cost reimbursement amount of \$10,000.00.

Secondly, although not directly tied to the language in the proposed consent order, Florida Rock would be willing to accede to the Department's wish for the company to install a Continuous Emissions Monitor (CEM) for VOC emissions, and not contest such a requirement in the Title V Permit. As you know, the CEM provision of the new federal rules is not applicable to Florida Rock's facility. Nevertheless, we would be willing to comply with the Department's request as part of an overall settlement. The added capital and operating expenses alone would justify reducing the proposed penalty.

- FOR SETTLEMENT DISCUSSIONS ONLY -

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Mr. Kirby B. Green, III
Mr. Ernie Frye
February 7, 2001
Page 2

Please keep in mind that I have tried to keep the Department apprised of our actions throughout the period in question. In fact, when our lawyers met with Larry Morgan and Mr. Frye on September 6, 2000, we acceded to the suggestion to put the whole matter under consent order. Although we did not receive a draft for our consideration until late December (for understandable reasons), the company is happy that we are now ready to put this matter to rest.

We also propose that the penalty amount be satisfied through a Supplemental Environmental Project (SEP) in Alachua County, Florida, and if this is agreeable to you, will immediately develop one for your approval.

Parenthetically, the new federal rules which require CEMs for VOCs also establishes a MACT standard for Portland cement plants of 50 ppmvd, which is equivalent to approximately 43.4 pounds per hour THC with the facility operating in compound mode. Florida Rock, during the period of anomalous VOC emissions last summer, did not exceed this new MACT standard. I ask that a certain element of fairness be applied to this situation relative to the national standards.

Another justification for considering a minor penalty is that the anomalous VOC emissions did not result from a failure of BACT (i.e., the combustion technology recognized in the construction permit as BACT). We have explained that at length in Florida Rock's allegations in our redraft of the consent order.

Additionally, please find enclosed a VOC Emission Comparison, previously provided to your counsel, which calculates and compares actual emissions against permitted emissions. This analysis reveals that Florida Rock actually emitted 2.488 tons less than permitted from July 13, 2000 through December 31, 2000. We have also calculated our lost production based on our extensive efforts to diagnose the anomalous emissions, which have been provided to your counsel, see attached. Lost production, through only September 23, 2000, amounted to at least 55,119.8 tons of clinker; at an average price of \$70 per ton, that amounts to approximately \$3,858,386 in lost revenues due to these difficulties. In short, the company did not sustain any economic benefits, but instead suffered tremendous losses in both clinker production and lost revenues.

As you know, the extensive investigation of the anomalous VOC emissions revealed that the excess emissions were not originating from the BACT-derived and designed pyro-processing system, but instead from a high hydrocarbon content in the mill scale used as a raw material. Nevertheless, in order to put these issues to rest, and in consideration of the

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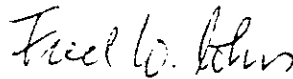
Mr. Kirby B. Green, III
Mr. Ernie Frye
February 7, 2001
Page 3

minor nature of the VOC emissions, Florida Rock is agreeable to installing a CEM for VOC emissions, subject to a new 30-day rolling average, as part of an overall settlement.

Our attorneys tell us that you will be meeting internally to discuss a final settlement on Friday, February 9, 2001. Please call me before or during your meeting if you desire additional information or require my assistance in any way.

Thank you for your help in this matter. I look forward to hearing from you in the very near future concerning the conclusion of this matter.

Sincerely,



Fred W. Cohrs

c: Howard Rhodes
Al Linero, P.E.
Trina Vielhauer

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**FLORIDA ROCK INDUSTRIES, INC.
LOST PRODUCTION**

Date	Rated Production	Actual	Lost Production
7/14/00	2300	1877	423
7/15/00	2300	1600	700
7/16/00	2300	1533.4	766.6
7/17/00	2300	1574.6	725.4
7/18/00	2300	1799.4	500.6
7/19/00	2300	1789.1	510.9
7/20/00	2300	1329.1	970.9
7/21/00	2300	1577	723
7/22/00	2300	1475.2	824.8
7/23/00	2300	1672.8	627.2
7/24/00	2300	1876.4	423.6
7/25/00	2300	1749.7	550.3
7/26/00	2300	1776	524
7/27/00	2300	1776	524
7/28/00	2300	1269.7	1030.3
7/29/00	2300	1541.9	758.1
7/30/00	2300	1621.9	678.8
7/31/00	2300	1304.8	995.2
8/1/00	2300	1309.7	990.3

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**FLORIDA ROCK INDUSTRIES, INC.
LOST PRODUCTION**

Date	Rated Production	Actual	Lost Production
8/2/00	2300	1912.7	387.3
8/3/00	2300	1889.7	410.3
8/4/00	2300	1735.2	564.8
8/5/00	2300	1761.2	538.8
8/6/00	2300	1869.1	430.9
8/7/00	2300	1992.7	307.3
8/8/00	2300	1516.3	783.7
8/9/00	2300	764.9	1535.1
8/10/00	2300	2015.8	284.2
8/11/00	2300	2062.4	237.6
8/12/00	2300	2174	126
8/13/00	2300	2147.9	152.1
8/14/00	2300	2187.3	112.7
8/15/00	2300	2079.4	220.6
8/16/00	2300	2186.7	113.3
8/17/00	2300	2044.3	255.7
8/18/00	2300	1907.9	392.1
8/19/00	2300	1177.6	1122.4
8/20/00	2300	0.6	2299.4

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**FLORIDA ROCK INDUSTRIES, INC.
LOST PRODUCTION**

Date	Rated Production	Actual	Lost Production
8/21/00	2300	1095.2	1204.8
8/22/00	2300	733.3	1566.7
8/23/00	2300	2.4	2297.6
8/24/00	2300	0	2300
8/25/00	2300	0	2300
8/26/00	2300	30.3	2269.7
8/27/00	2300	164.9	2135.1
8/28/00	2300	1913.9	386.1
8/29/00	2300	1832.8	467.2
8/30/00	2300	1989.7	310.3
8/31/00	2300	1831.5	468.5
9/1/00	2300	550.9	1749.1
9/2/00	2300	1535.7	764.3
9/3/00	2300	1964.8	335.2
9/4/00	2300	2158.8	141.2
9/5/00	2300	2327.9	-27.9
9/6/00	2300	2321.3	-21.3
9/7/00	2300	2027.3	272.7
9/8/00	2300	2017.6	282.4
9/9/00	2300	2133.4	166.6

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**FLORIDA ROCK INDUSTRIES, INC.
LOST PRODUCTION**

Date	Rated Production	Actual	Lost Production
9/10/00	2300	1745.5	554.5
9/11/00	2300	1610.3	689.7
9/12/00	2300	0	2300
9/13/00	2300	1170.3	1129.7
9/14/00	2300	1909.7	390.3
9/15/00	2300	1812.1	487.9
9/16/00	2300	1590.3	709.7
9/17/00	2300	1318.2	981.8
9/18/00	2300	1438.2	861.8
9/19/00	2300	1593.3	706.7
9/20/00	2300	1389.7	910.3
9/21/00	2300	1424.9	875.1
9/22/00	2300	1215.2	1084.8
9/23/00	2300	1752.1	547.9
Totals: Days 72		110480.9	55119.8

LOST PRODUCTION: 55,119.8 TONS
AVERAGE PRICE PER TON: \$ 70
DOLLARS LOST: 55,119.8 TONS x $\frac{\$70}{\text{TON}}$ = \$ 3,858,386

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VOC Emission Comparison: Actual vs Permitted

I. Period of alleged excess emissions (July 13, 2000 - September 22, 2000).

A. Actual Emissions

1. Actual emissions based on actual tons of clinker produced

108,728.1 tons of clinker x 0.30 lbs. VOC/ton of clinker + 2,000
lbs./ton = 16,309 tons VOC actually emitted

B. Permitted Emissions

1. Permitted emissions based on rate of 2,300 tons of clinker per day,
for 71 days, at permitted emission levels

71 days x 2,300 tons of clinker x 0.12 lbs. VOC/ton of clinker +
2,000 lbs./ton = 9,798 tons VOC permitted to be emitted

C. Difference Between Actual and Permitted Emissions

16,309 tons VOC actually emitted
-9,798 tons VOC permitted to be emitted
6,511 tons VOC emitted above allowable

**II. AASHTO Type I Cement Production - No Mill Scale Used (September 23,
2000 - October 10, 2000).**

A. Actual Emissions

1. Actual emissions based on actual tons of clinker produced

26,399.21 tons of clinker x 0.082 lbs. VOC/ton of clinker + 2,000
lbs./ton = 1,082 tons VOC actually emitted

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B. Permitted Emissions

1. Permitted emissions based on rate of 2,300 tons of clinker per day, for 18 days, at permitted emission levels

18 days x 2,300 tons of clinker x 0.12 lbs. VOC/ton of clinker +
2,000 lbs./ton = 2.484 tons VOC permitted to be emitted

C. Difference Between Actual and Permitted Emissions

2.484 tons VOC permitted to be emitted
-1.082 tons VOC actually emitted
1.402 tons VOC emitted less than allowable

III. **AASHTO Type II Cement Production - Low THC Mill Scale (October 11, 2000
- December 31, 2000)**

A. Actual Emissions

1. Actual emissions based on actual tons of clinker produced

94,089.52 tons of clinker x 0.082 lbs. VOC/ton of clinker + 2,000
lbs./ton = 3.857 tons VOC actually emitted

B. Permitted Emissions

1. Permitted emissions based on rate of 2,300 tons of clinker per day, for 81 days, at permitted emission levels

81 days x 2,300 tons of clinker x 0.12 lbs. VOC/ton of clinker +
2,000 lbs./ton = 11.178 tons VOC permitted to be emitted

C. Difference Between Actual and Permitted Emissions

11.178 tons VOC permitted to be emitted
- 3.857 tons VOC actually emitted
7.321 tons VOC emitted less than allowable

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IV. **Entire Time Period (July 13, 2000 - December 31, 2000)**

A. Actual Emissions Actual emissions based on actual tons of clinker produced

16.309 tons VOC emitted (July 13, 2000 - September 22, 2000)

1.082 tons VOC emitted (September 23, - October 10, 2000)

+ 3.857 tons VOC emitted (October 11, 2000 - December 31, 2000)

Total: 21.248 tons VOC emitted (July 13, 2000 - December 31, 2000)

B. Permitted Emissions

1. Permitted emissions based on rate of 2,300 tons of clinker per day, for 172 days, at permitted emission levels

172 days x 2,300 tons of clinker x 0.12 lbs. VOC/ton of clinker +
2,000 lbs./ton = 23.736 tons VOC permitted to be emitted

C. Difference Between Actual and Permitted Emissions

23.736 tons VOC permitted to be emitted

- 21.248 tons VOC actually emitted

2.488 tons VOC emitted less than allowable

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KOGLER & ASSOCIATES

ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 187-00-09

January 11, 2001

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JAN 16 2001

BUREAU OF AIR REGULATION

VIA FAX AND MAIL

Mr. Lalit Lalwani
Florida Department of
Environmental Protection
101 N.W. 75th Street, Suite 3
Gainesville, FL 32607-1609

Subject: Florida Rock Industries, Inc.
Newberry, Florida
Permit No. AC01-267311

Dear Mr. Lalwani:

Koogler & Associates is scheduled to conduct emission measurements for beryllium (EPA Method 104) on the kiln/raw mill stack at the Thompson S. Baker Cement Plant on Wednesday, January 24, 2001. The test crew will arrive on site at 7:00 a.m.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

KOGLER & ASSOCIATES


John B. Koogler Ph.D., P.E.

JBK:wa

c: Mr. Al Linero, FDEP, Tallahassee
Mr. Howard Rhodes, FDEP, Tallahassee
Mr. Chris Kirts, FDEP, Jacksonville
Mr. George Townsend, FRI
Mr. Cary Cohrs, FRI
Mr. Fred Cohrs, FRI
Mr. Segundo Fernandez, Oertel, Hoffman



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

November 20, 2000

Segundo J. Fernandez, Esq.
Oertel, Hoffman, Fernandez & Cole, P.A.
301 S. Bronough St., 5th Floor
Tallahassee, Florida 32301

Via regular mail

RE: Florida Rock Industries, Inc.-Alachua County

Dear Mr. Fernandez:

Enclosed is a draft consent order regarding the Department's civil enforcement case for air pollution control violations at Florida Rock Industries, Inc.'s Plant in Newberry, Alachua County, Florida. This draft consent order addresses the VOC emissions which occurred earlier this year as well as several outstanding air pollution control compliance issues.

Once you have had a chance to review this document with your client, please contact me to discuss the resolution of this matter. I can be contacted at 850/921-8875.

Sincerely,

Trina L. Vielhauer
Assistant General Counsel

pc: Howard Rhodes, Al Linero
Ernie Frey, Chris Kirts, Rick Banks
Doug Beason
Kirby Green

3. Respondent owns and operates Thompson S. Baker Cement Plant ("Facility") located on Alachua County Road 235, Newberry, Alachua County, Florida. The Facility is a portland cement plant that makes types 1 and 2 cement.
4. The Facility is a "facility" as that term is defined in Rule 62-204.200(16) F.A.C. and is an "affected facility" as that term is used throughout 40 CFR 60.7, Notification and Recordkeeping.
5. As part of its activities at the Facility, Respondent utilizes and has utilized equipment, operations and activities, specifically the kiln/raw mill, that have emitted or caused and that emit or cause the emission of "air pollutants" as that term is defined in Rule 62-204.200(2) F.A.C.
6. The kiln/raw mill is an "emission unit" as that term is defined in Rule 62-204.200(14) F.A.C. and is a stationary source.
7. On March 11, 1995, the Department received Respondent's application for a construction permit for its Facility.
8. Rule 62-204.340, F.A.C., establishes the areas of the state that are in attainment and nonattainment with the national ambient air quality standards ("NAAQS"). Alachua County is in attainment with the NAAQS.
9. Portland cement plants are a listed "Major Facility Category" in Table 62-212.400-1, F.A.C.
10. Respondent's Facility has the potential to emit 100 tons per year of at least one regulated air pollutant and is, therefore, a New Major Facility subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration ("PSD").
11. Rule 62-212.400, F.A.C., requires Respondent to implement the best available control technology ("BACT").

12. As part of the application process, Respondent provided the Department with information related to the BACT for its Facility pursuant to Rule 62-212.400(5)(h), F.A.C.

13. On December 23, 1996, the Department issued permit # AC01-267311 (PSD-FL-228) ("Permit") for Respondent's Facility with an expiration date of December 31, 1999. By letter dated September 17, 1999, Respondent requested an extension of the Permit. By letter dated October 6, 1999, the Department extended the Permit from December 31, 1999 to July 30, 2000 to allow completion of physical construction. A hearing has been requested by a third party on the October 6, 1999 extension. At Respondent's request, the Permit was amended on July 13, 2000 to allow Respondent to demonstrate compliance with VOC emissions by either Method 25 or Method 25A ("amended Permit"). By letter dated July 17, 2000, Respondent requested an extension of the amended Permit.

14. Respondent's Facility is subject to all applicable provisions of Chapter 403, F.S., Chapters 62-204 through 297 F.A.C., and 40 CFR 60 (1995) which are incorporated into Specific Condition 1 of the Permit and amended Permit.

15. Respondent's Facility is subject to the requirements established in 40 CFR 60, Subpart A, Appendix A and Appendix B (1994), Subparts F, Y, OOO and Kb which are incorporated by Rule 62-204, F.A.C., and Specific Condition 2 of the Permit and amended Permit.

16. Based, at least in part, upon information submitted to the Department by Respondent, Table II of the Permit and amended Permit establishes an emission limit for volatile organic compounds ("VOC") from the kiln/raw mill stack of 11.55 pounds per hour and 0.12 pounds per ton of clinker.

17. Specific Condition 6 of the Permit required Respondent to utilize Method 25-
"determination of total gaseous nonmethane organic emissions as carbon", to demonstrate

compliance with VOC emission limits. Specific Condition 6 of the amended Permit allowed Respondent to utilize Method 25A—"determination of total gaseous organic concentration using a flame ionization analyzer" to demonstrate compliance with VOC emission limits.

18. 40 CFR 60.7(a)(1) requires an owner or operator of a facility to furnish the Administrator with notification of commencement of construction of the facility. 40 CFR 60.7(a)(3) requires an owner or operator of a facility to furnish the Administrator with notification of the actual date of initial startup of an affected facility. This notification must be postmarked within 15 days of the initial startup.

19. On or about December 31, 1996, Respondent commenced construction of its facility. Respondent did not provide the notice required by 40 CFR 60.7(a)(1).

20. On or about October 15, 1999, Respondent commenced initial startup of its Facility. Respondent did not provide the notice required by 40 CFR 60.7(a)(3).

21. Specific Condition 6 of the Permit required and the amended Permit requires Respondent to install, operate and use a continuous emission monitor ("CEM") to determine compliance with applicable emission limits for sulfur dioxide.

22. By letter dated July 25, 2000, Respondent advised the Department:

"Adjustment and/or modifications may be required for these CEMs. It is anticipated that this matter can be completed by August 15, 2000. If the evaluation results in the need to purchase new CEM equipment, [Respondent] will notify the Department with the anticipated delivery and installation dates".

23. To date, Respondent has not used a CEM to demonstrate compliance with the applicable emission limits for sulfur dioxide nor notified the Department of anticipated delivery and installation dates for replacement CEMs

24. Koogler & Associates Environmental Services ("Koogler") is the company that has conducted the stack testing referred to in the consent order on behalf of Respondent.

25. On May 31 and June 1, 2000, Koogler conducted stack testing at the Facility using EPA Method 25A to determine VOC emissions. The results of this test were submitted to the Department on September 22, 2000 and indicated an average emissions rate of 71.1 lbs/hr VOCs reported as total hydrocarbons ("THC"). Respondent failed to immediately notify the Department of possible noncompliance with the VOC emission limit set forth in the Permit and amended Permit [see paragraph 16 above] as required by Rule 62-4.130, F.A.C. In addition, Method 25 was not used to determine VOC emissions as required by Specific Condition 6 of the Permit.

26. On June 16, 2000, Koogler notified the Department that a compliance stack test would be conducted at the Facility beginning on July 5, 2000.

27. On July 13, 2000, Department personnel witnessed compliance stack tests at the Facility [EPA Methods 6C (SO₂), 7E (NO_x), 10 (CO), and 25A (VOC)].

28. On August 28, 2000, the Department received the results of the July 13, 2000 compliance stack tests. The average VOC emission rate during the July 13, 2000 compliance stack test at the Facility was reported as 30.8 lbs/hr. The VOC emissions exceeded the VOC emission limit set forth in the Permit and amended Permit [see paragraph 16 above].

29. On August 2, 2000, Department personnel witnessed compliance stack tests at the Facility [EPA Method 25A and Method 25 (VOC)].

30. On September 25, 2000, the Department received the results of the August 2, 2000 compliance stack tests. The average VOC emission rate during the August 2, 2000 compliance stack test at the Facility was reported as 37.4 lbs/hr. The VOC emissions exceeded the VOC emission limit set forth in the Permit and amended Permit [see paragraph 16 above].

31. On September 23, 2000 a stack test was conducted at the Facility using Method 25A and Method 25 (VOC). The average VOC emissions were reported to be in compliance with the VOC emission limit set forth in the Permit and amended Permit[see paragraph 16 above].

32. Respondent operated the Facility continuously from at least May 31, 2000 through present except a shutdown period due to a lightning strike from August 19 through 25, 2000.

Having reached a resolution of the matter, the Department and the Respondent mutually agree and it is,

ORDERED

33. Within thirty days of the effective date of this Consent Order, Respondent shall pay the Department \$ 117,400 in settlement of the matters addressed in this Consent Order. This amount includes \$107,400 in civil penalties for alleged violations of the Florida Statutes and of the Department's rules and \$10,000 for costs and expenses incurred by the Department for costs and investigation of this matter and the preparation and tracking of this Consent Order. Payment shall be made by cashier's check or money order. The instrument shall be made payable to the "Department of Environmental Protection" and shall include thereon the OGC number assigned to this Consent Order and the notation "Ecosystem Management and Restoration Trust Fund". The payment shall be sent to: Department of Environmental Protection, Northeast District, 7825 Baymeadows Way, Jacksonville, FL 32256-7590.

34. Within 120 days of the effective date of this consent order and no later than April 1, 2001, Respondent shall install, calibrate, maintain and operate a continuous emission monitoring system in the kiln/raw mill stack to measure and record the emissions of VOC from the kiln/raw mill. The CEM system shall be installed, operated and maintained in accordance with Performance Specification 8A of Appendix B to 40 CFR 60. The owner or operator shall report no later than

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the subject Consent Order have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Sections 120.569 and 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-106.205, Florida Administrative Code.

A person whose substantial interests are affected by the Consent Order may file a timely petition for an administrative hearing under Sections 120.569 and 120.57, Florida Statutes, or may choose to pursue mediation as an alternative remedy under Section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth below.

Mediation may only take place if the Department and all the parties to the proceeding agree that mediation is appropriate. A person may pursue mediation by reaching a mediation agreement with all parties to the proceeding (which include the Respondent, the Department, and any person who has filed a timely and sufficient petition for a hearing) and by showing how the substantial interests of each mediating party are affected by the Consent Order. The agreement must be filed in (received by) the Office of General Counsel of the Department at 3900

Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) Either an explanation of how the substantial interests of each mediating party will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that each party has already filed, and incorporating it by reference.

(h) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in

settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their petitions within 21 days of receipt of this notice. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

40. Entry of this Consent Order does not relieve Respondent of the need to comply the applicable federal, state or local laws, regulations or ordinances

41. The terms and conditions set forth in this Consent Order may be enforced in a court of competent jurisdiction pursuant to Sections 120.69 and 403.121, Florida Statutes. Failure to comply with the terms of this Consent Order shall constitute a violation of Section 403.161(1)(b), Florida Statutes.

42. Respondent is fully aware that a violation of the terms of this Consent Order may subject Respondent to judicial imposition of damages, civil penalties up to \$10,000 00 per day per violation and criminal penalties.

43. Respondent shall allow all authorized representatives of the Department access to the property and Facility at reasonable times for the purpose of determining compliance with the terms of this Consent Order and the rules of the Department.

44. All plans, applications, penalties, stipulated penalties, costs and expenses, and information required by this Consent Order to be submitted to the Department should be sent to Florida

Department of Environmental Protection, Northeast District Office, 7825 Baymeadows Road Suite 200B, Jacksonville, Florida 32256-7590.

45. The Department hereby expressly reserves the right to initiate appropriate legal action to prevent or prohibit any violations of applicable statutes or the rules promulgated thereunder that are not specifically addressed by the terms of this Consent Order.

46. The Department, for and in consideration of the complete and timely performance by Respondent of the obligations agreed to in this Consent Order, hereby waives its right to seek judicial imposition of damages or civil penalties for alleged violations outlined in this Consent Order. Respondent acknowledge but waive their right to an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes, on the terms of this Consent Order. Respondent acknowledge their right to appeal the terms of this Consent Order pursuant to Section 120.68, Florida Statutes, but waive that right upon signing this Consent Order.

47. The provisions of this Consent Order shall apply to and be binding upon the parties, their officers, their directors, agents, servants, employees, successors, and assigns and all persons, firms and corporations acting under, through or for them and upon those persons, firms and corporations in active concert or participation with them.

48. No modifications of the terms of this Consent Order shall be effective until reduced to writing and executed by both of the Respondent and the Department.

49. In the event of a sale of the Facility or of the property upon which the Facility is located, if all of the requirements of this Consent Order have not been fully satisfied, Respondent shall, at least 30 days prior to the sale or conveyance of the property or Facility, (1) notify the Department of such sale or conveyance, (2) provide to the Department the name and address of the purchaser, or operator, or person(s) in control of the Facility, and (3) provide a copy of this Consent Order

Ernest E. Frey
Director of District Management
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk receipt of
which is hereby acknowledged.

CLERK

Date

cc: Larry Morgan



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 187-00-09

FAX TRANSMITTAL FORM

TO: Lalit Lalwani
Christopher Kusta
Martin Costello

FAX NO. _____

FROM: John Koogler

DATE: 11/13/00 SENT BY: Wendy

The text being transmitted consists of _____ (_____) page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: _____

This message is intended for use only by the individual to whom it has been addressed and may contain confidential or privileged information. If you are not the intended recipient, please note that the use, copying or distribution of this information is not permitted. If you have received this FAX in error, please destroy the original and notify the sender immediately at (352) 377-5822 so that we may prevent any recurrence. Thank you.



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 - FAX/377-7158

KA 187-00-09

November 10, 2000

VIA FAX

Mr. Lalit Lalwani
Florida Department of
Environmental Protection
101 NW 75th Street, Suite 3
Gainesville, FL 32607-1609

Subject: SO₂ Continuous Emission Monitoring
Florida Rock Industries, Inc.
Newberry, Florida
Permit No. AC01-267311

Dear Mr. Lalwani:

Koogler & Associates is scheduled to certify the temporary SO₂ Continuous Emission Monitor (CEM) at the Thompson S. Baker Cement Plant on Tuesday, November 14, 2000. The test crew will arrive on site at 7:00 a.m.

If you have any questions, please do not hesitate to contact me at 352-377-5822.

Very truly yours,

KOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa

- c: Mr. Christopher Kirts, FDEP, Jacksonville
- Mr. George Townsend, FRI
- Mr. Cary Cohrs, FRI
- Mr. Fred Cohrs, FRI
- Mr. Segundo Fernandez



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 187-00-09

November 1, 2000

RECEIVED

NOV 03 2000

BUREAU OF AIR REGULATION

Mr. Chris Kirts
Florida Department of
Environmental Protection
7825 Baymeadows Way, Suite B-200
Jacksonville, FL 32256-7590

Subject: Hydrocarbon Emission Measurements Report
Florida Rock Industries, Inc.
Newberry, Florida
Permit No. AC01-267311/PSD-FL-228

Dear Mr. Kirts:

Enclosed is a copy of our report describing the results of hydrocarbon emission measurements conducted at the Thompson S. Baker Cement Plant on September 23, 2000.

If you have any questions regarding this report, please do not hesitate to contact me at 352-377-5822.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:wa
Enc.

c: Mr. Martin Costello, FDEP, Tallahassee
Mr. Lalit Lalwani, FDEP, Gainesville
Mr. George Townsend, FRI
Mr. Cary Cohrs, FRI
Mr. Fred Cohrs, FRI
Mr. Segundo Fernandez

RECEIVED

NOV - 6 2000

Bureau of Air Monitoring
& Mobile Sources

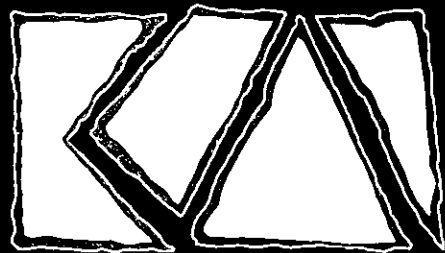
HYDROCARBON EMISSION
MEASUREMENTS

FLORIDA ROCK INDUSTRIES
THOMPSON S. BAKER CEMENT PLANT
NEWBERRY, FLORIDA

PERMIT NO. AC01-267311/PSD-FL-228

TEST DATE: SEPTEMBER 23, 2000

SUBMITTED: NOVEMBER 1, 2000



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5322 • FAX 377-7158

**HYDROCARBON EMISSION
MEASUREMENTS**

**FLORIDA ROCK INDUSTRIES
THOMPSON S. BAKER CEMENT PLANT
NEWBERRY, FLORIDA**

PERMIT NO. AC01-267311/PSD-FL-228

TEST DATE: SEPTEMBER 23, 2000

**KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW 13TH STREET
GAINESVILLE, FLORIDA
352-377-5822**

SUBMITTED: NOVEMBER 1, 2000



To the best of my knowledge, all applicable field and analytical procedures comply with the Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.



John B. Koogler, Ph.D., P.E.

State of Florida
Registration No. 12925

11/1/00

Date



TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SAMPLING POINT LOCATIONS	3
3.0	FIELD AND ANALYTICAL PROCEDURES	4
4.0	SUMMARY OF RESULTS	6

APPENDIX

1.0 INTRODUCTION

Florida Rock Industries (FRI) owns and operates a 2300 ton per day (clinker) precalciner Portland cement plant on CR 235, two miles north of the city center of Newberry, Florida. On September 23, 2000, Ambient Air Services, Inc. as a subcontractor to Koogler & Associates Environmental Services of Gainesville, Florida, conducted total hydrocarbon and methane emission measurements on the kiln/raw mill stack utilizing a Thermo Environmental Instruments (TEI) Model 55C methane/total hydrocarbon analyzer. The instrument consists of a Flame Ionization Detector (FID) preceded by a chromatographic column. In one operating mode the total stack gas stream is introduced directly into the FID and analyzed for total hydrocarbons in accordance with EPA Method 25A (40 CFR 60, Appendix A). In the second operating mode, the stack gas stream first passes through the chromatographic column where methane is separated from the other hydrocarbons and analyzed by the FID in accordance with EPA Method 25A. These measurements are used to demonstrate compliance with the VOC emission limit of Permit AC01-267311/PSD-FL-228 for the kiln/raw mill.

The Northeast District Branch Office of the Florida Department of Environmental Protection (FDEP) in Gainesville, Florida and the Northeast District Office of FDEP in Jacksonville, Florida, were notified of the intent to conduct the emission measurements.

During the test period, the kiln was operating at an average preheater feed rate of 140.0 tons per hour (approximately 89.5 tph clinker) or within 10 percent of the permitted feed rate of 149.9 tons per hour. Mill scale (a source of iron) was not incorporated in the raw meal resulting in the production of Type I Portland cement clinker. The plant was operating in the compound mode; i.e., with both the kiln and raw mill operating.

The coal feed rate to the kiln during the test period averaged 9.11 tons per hour (nominally 12,900 Btu/lb). The heat input to the kiln for the test period averaged 235 MMBtu/hr. The permit limits the coal feed rate to 14.0 tons per hour and the heat input rate to 364 MMBtu per hour.

The permit for the plant limits volatile organic compound (VOC) emissions from the kiln/precalciner system to 11.55 pounds per hour or to 0.12 pounds per ton of clinker. The measured total hydrocarbon emission rate averaged 11.55 pounds per hour; the methane emission rate averaged 4.22 pounds per hour; and the VOC emission rate (the difference between total hydrocarbons and methane) averaged 7.33 pounds per hour or 0.082 pounds per ton of clinker.

Based on the data presented herein, it can be concluded that while operating under representative conditions and producing Type I Portland cement clinker, the plant is in compliance with the VOC emission limit of Permit AC01-267311/PSD-FL-228.

2.0 SAMPLING POINT LOCATIONS

Four sample ports are located in the 112-inch diameter, 241-foot high stack exhausting the kiln/raw mill. The ports are 50.6 feet (5.4 stack diameters) below the top of the stack and 146.8 feet (15.7 diameters) above the point where the kiln/raw mill gases enter the stack. Based on the requirements of EPA Method 1 (40 CFR 60, Appendix A), 12 sample points were selected for the velocity traverse; three points through each of the four ports. Gas samples were collected at a single point near the center of the stack.

3.0 FIELD AND ANALYTICAL PROCEDURES

Hydrocarbon emission measurements were made with a TEI Model 55C methane/total hydrocarbon analyzer in accordance with EPA Test Method 25A. Samples were collected at a single point near the mid-point of the stack.

The total hydrocarbon concentration of the kiln/raw mill stack gas was measured (as propane v/v, wet basis) with the TEI Model 55C Hydrocarbon Analyzer by introducing the wet gas stream directly to the instrument FID and the methane concentration was measured (as propane v/v, wet basis) by first passing the gas stream through the instrument chromatographic column to separate the methane from the other hydrocarbons and then introducing the methane to the instrument FID. The instrument analog voltage responses to the total hydrocarbons and methane were compared to responses of certified calibration gases. All responses were digitized at the rate of once per second, averaged by the minute, scaled as propane (ppm) and recorded with a Telog Data Logger Model 3307.

One moisture run and three velocity determinations were conducted in accordance with EPA Reference Method Nos. 1-4 to obtain wet volumetric flow rates. These flow rates were used in conjunction with the concentration measurements to calculate total hydrocarbon, methane and VOC mass emission rates.

All EPA tests methods are described in 40 CFR 60, Appendix A and have been adopted by reference by FDEP by Rule 62-297.401, F.A.C.

4.0 SUMMARY OF RESULTS

The hydrocarbon emission measurements made on September 23, 2000, are summarized in Table 1. The total hydrocarbon emission rate ranged from 11.15 to 12.06 pounds per hour and averaged 11.55 pounds per hour and the methane emission rate ranged from 4.06 to 4.43 pounds and averaged 4.22 pounds per hour.

The VOC emission rate (total hydrocarbons minus methane) averaged 7.33 pounds per hour or 0.082 pounds per ton of clinker. The maximum permitted VOC emission limit for the kiln/raw mill is 11.55 pounds per hour or 0.12 pounds per ton of clinker. Thus, the average VOC emission rate of 7.33 pounds per hour (0.082 pounds per ton of clinker) was well below the maximum permitted emission rate of 11.55 pounds per hour and the rate of 0.12 pounds per ton of clinker.

During the test period, the preheater feed rate averaged 140 tons per hour and the clinker production rate averaged 89.5 tons per hour. The plant was operating in the compound mode.

The stack gas flow rate averaged 160,525 standard cubic feet per minute, wet (134,841 scfmd). The stack gas temperature averaged 198°F and the moisture content averaged 16.0 percent.

Calculations, field and analytical data sheets, plant operating information, equipment calibration sheets and a list of project participants are included in the Appendix of this report.

TABLE 1
HYDROCARBON EMISSION DATA

FLORIDA ROCK INDUSTRIES, INC
NEWBERRY, FLORIDA

SOURCE: Kiln/Raw Mill Stack

DATE: September 23, 2000

Run No.	Stack Flow Rate		Temp (°F)	Moist (%)	Total Hydrocarbons		Methane		VOC Emission Rate (lb/hr)
	(SCFMD)	(SCFMW)			Conc. (1) (ppm, v/v wet)	Emissions (lb/hr)	Conc. (2) (ppm, v/v wet)	Emissions (lb/hr)	
1	133,995	159,518	200	16.0	10.19	11.15	10.5	4.17	6.98
2	134,670	160,321	196	16.0	10.40	11.44	10.16	4.06	7.38
3	135,858	161,736	199	16.0	10.90	12.06	11.0	4.43	7.63
Avg	134,841	160,525	198	16.0		11.55		4.22	7.33

(1) as propane

(2) as methane

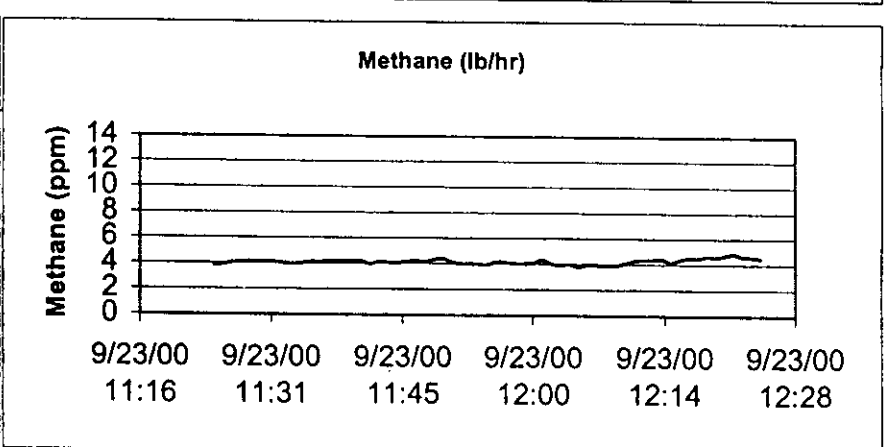
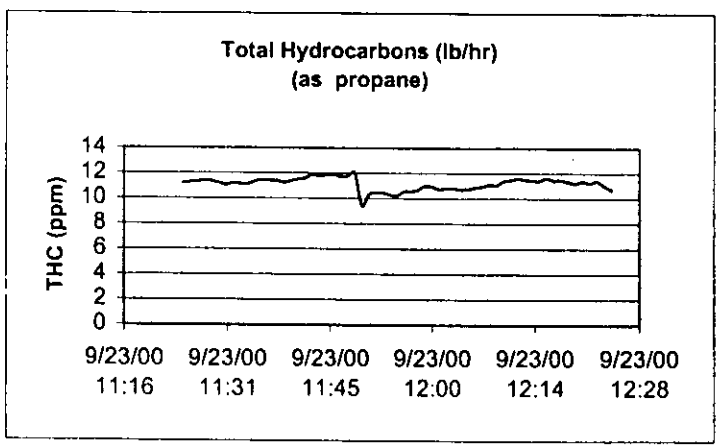
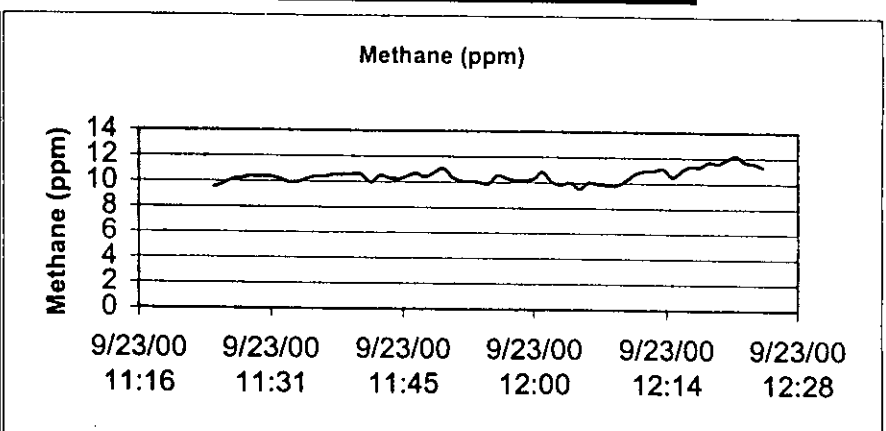
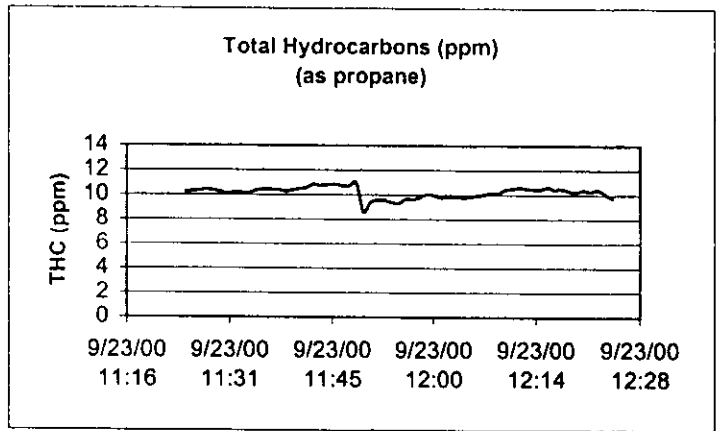
APPENDIX

CALCULATIONS

Florida Rock - Newberry, Florida
Report of Compliance Test - Total Hydrocarbons
Run 1 - Summary

Date: 9/23/00
 Time: 11:25 - 12:25

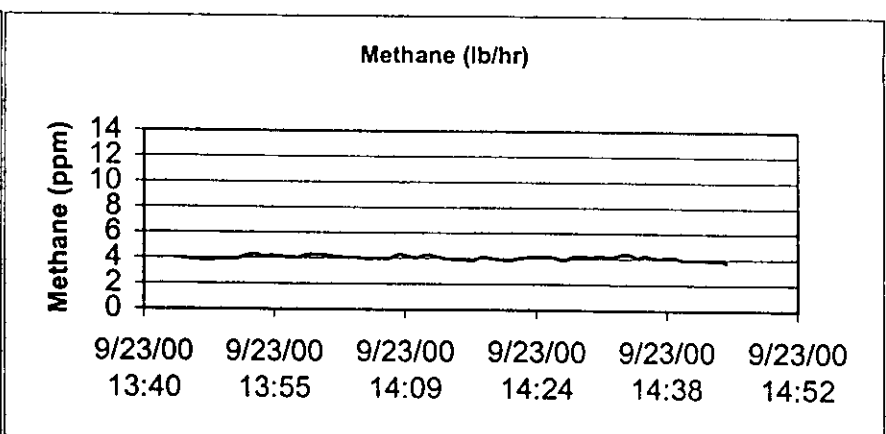
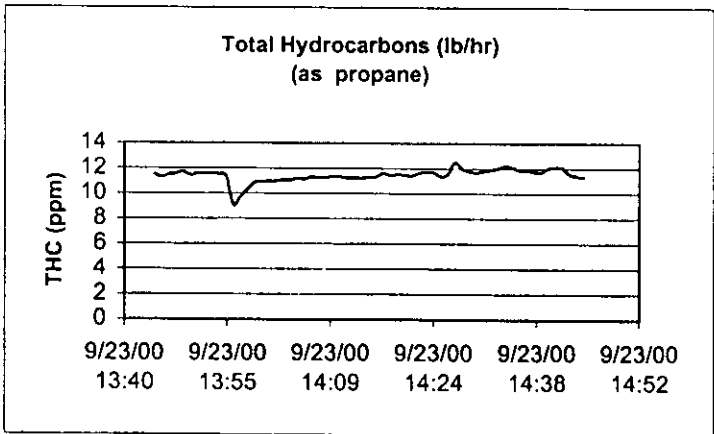
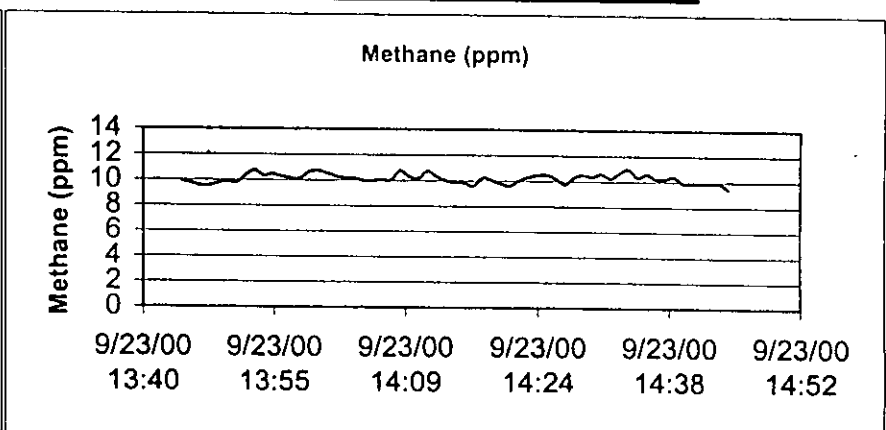
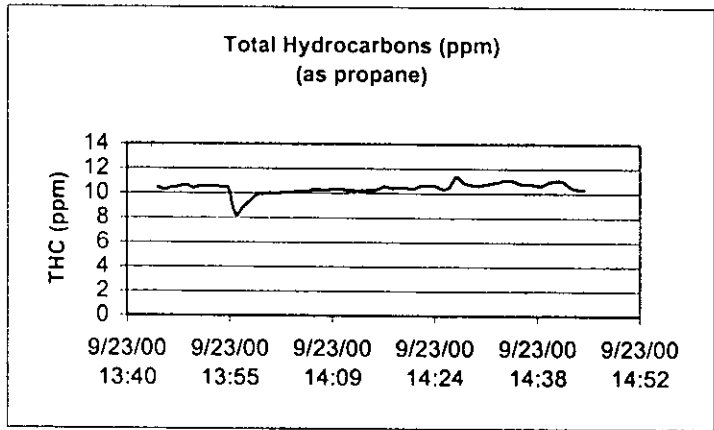
Average Total Hydrocarbons (ppm) = 10.19	Average Methane (ppm) = 10.5
Average Total Hydrocarbons (lb/hr) = 11.15	Average Methane (lb/hr) = 4.17



Florida Rock - Newberry, Florida
Report of Compliance Test - Total Hydrocarbons
Run 2 - Summary

Date: 9/23/00
Time: 13:45 - 14:45

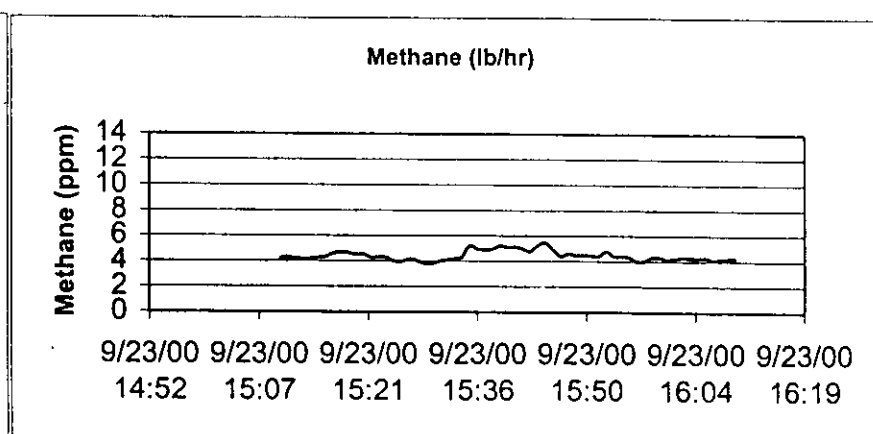
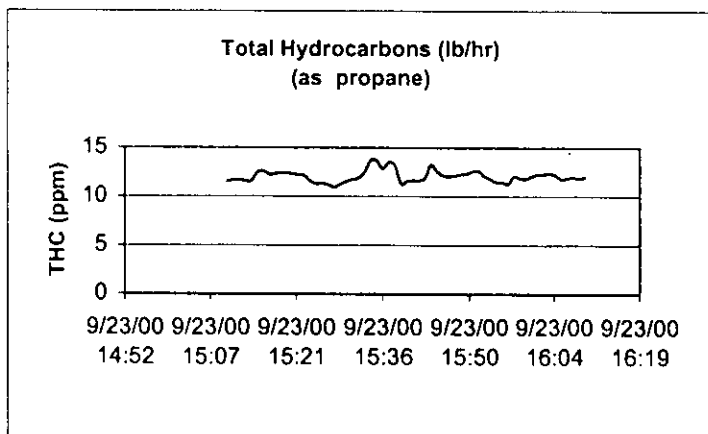
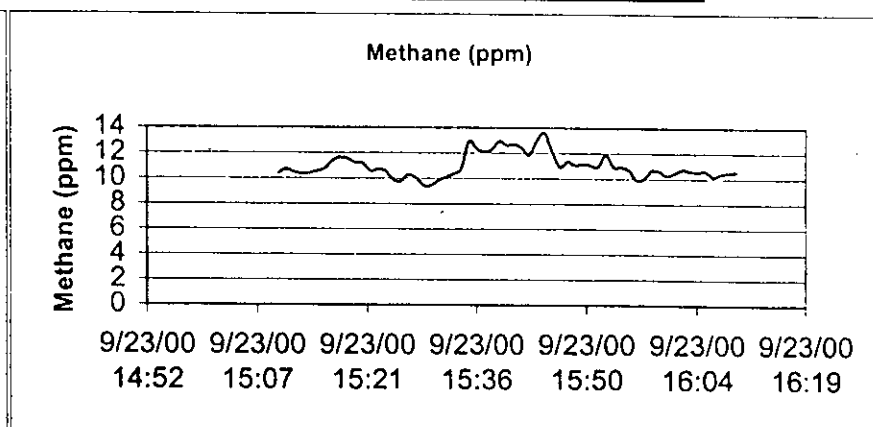
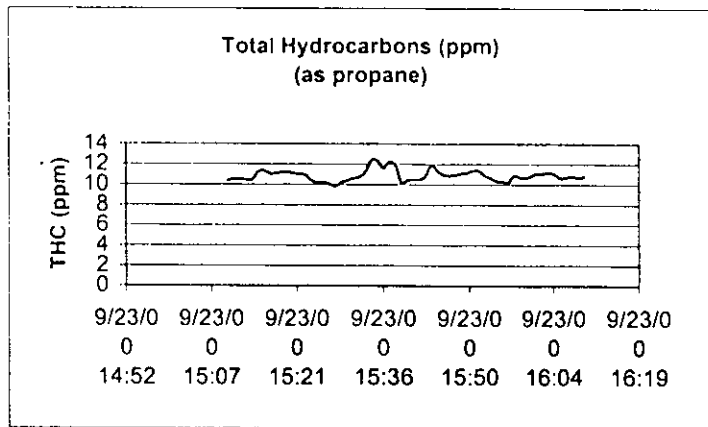
Average Total Hydrocarbons (ppm) = 10.40	Average Methane (ppm) = 10.16
Average Total Hydrocarbons (lb/hr) = 11.44	Average Methane (lb/hr) = 4.06



Florida Rock - Newberry, Florida
 Report of Compliance Test - Total Hydrocarbons
 Run 3 - Summary

Date: 9/23/00
 Time: 11:25 - 12:25

Average Total Hydrocarbons (ppm) = 10.9	Average Methane (ppm) = 11.0
Average Total Hydrocarbons (lb/hr) = 12.06	Average Methane (lb/hr) = 4.43



Example Calculation

Using Point #1 9/23/00 11:25 as example

Parts per million → pounds per hour

Total Hydrocarbons calibrated to propane

Propane molecular weight = $12 \times 3 + 8 \times 1 = 44$ grams per mole

$$\text{Formula} \quad \frac{60 \times mw \times ppm \times flow}{385.1 \times 10^6}$$

Where

- 60 = minutes per hour conversion
- mw = molecular weight of propane = 44 g/mole
- ppm = instrument response, ppm propane on a volume basis
- flow = standard cubic feet per minute, wet flow as determined by Methods 1-4
- 385.1×10^6 = constant

Example Point

$$\frac{10.23 \text{ ppm} \times 44 \text{ g/mole} \times 60 \text{ min/hr.} \times 159518 \text{ SCFMW}}{385.1 \times 10^6} \text{ equals } 11.18 \text{ pounds per hour}$$

For Methane (MW = $12 \times 1 + 1 \times 4 = 16$ g/mole)

$$\frac{9.54 \times 16 \times 60 \times 159518}{385.1 \times 10^6} \text{ equals } 3.80 \text{ pounds per hour}$$

Ambient Air Services, Inc.
Environmental Consultants

106 Ambient Air Way
Starke, Florida 32091

(904) 964 - 8440
(904) 964 - 6675 fax

Volumetric Air-Flow Rates

Plant	Florida Rock		
Location	Newberry, Fl		
Stack	Cement Kiln		
Run Date	9/23/00		
Run Number	1	Volume Metered	0
Start Time	11:30	Meter Temp (Deg R)	
Finish Time	11:37	Orsat CO2 %	18.5
Barometric Pressure	29.95	Orsat O2 %	16
Stack Diameter (in.)	112	Orsat CO %	0
Stack Area sq. ft.	68.417	Orsat N %	65.5
Number of Points	12	Condensate Volume	
Avg of SQRT of V.H.	0.7810	Delta H (inches H2O)	
Meter Correction (Y)	0.99	Stack Pressure	29.99
Pitot Correction Factor	0.84	Stack Temp (Deg R)	659.9

=====

Moisture in stack gas, volume fraction	0.160
Dry Stack Gas, volume fraction	0.840
Molecular Weight of Stack Gas (Dry Basis)	31.60
Molecular Weight of Stack Gas (Stack conditions)	29.42
Specific gravity of Stack Gas Relative to Air	1.015
Excess Air (%)	
Average Stack Velocity, FPM	2907.2
Actual Stack Gas Flow Rate, ACFM	198902
Actual Stack Gas Flow Rate, (Dry) ACFMD	167078
Stack Gas Flow Rate (Standard conditions), SCFMD	133995
Stack Gas Flow Rate (Standard conditions), SCFMW	159518

Ambient Air Services, Inc.
Environmental Consultants

106 Ambient Air Way
 Starke, Florida 32091

(904) 964 - 8440
 (904) 964 - 6675 fax

Volumetric Air-Flow Rates

Plant	Florida Rock		
Location	Newberry, Fl		
Stack	Cement Kiln		
Run Date	9/23/00		
Run Number	2	Volume Metered	0
Start Time	13:46	Meter Temp (Deg R)	
Finish Time	13:53	Orsat CO2 %	15
Barometric Pressure	29.95	Orsat O2 %	13
Stack Diameter (in.)	112	Orsat CO %	0
Stack Area sq. ft.	68.417	Orsat N %	72
Number of Points	12	Condensate Volume	
Avg of SQRT of V.H.	0.7704	Delta H (inches H2O)	
Meter Correction (Y)	0	Stack Pressure	30.32
Pitot Correction Factor	0.84	Stack Temp (Deg R)	655.6

=====

Moisture in stack gas, volume fraction	0.160
Dry Stack Gas, volume fraction	0.840
Molecular Weight of Stack Gas (Dry Basis)	30.92
Molecular Weight of Stack Gas (Stack conditions)	28.85
Specific gravity of Stack Gas Relative to Air	0.995
Excess Air (%)	
Average Stack Velocity, FPM	2871.2
Actual Stack Gas Flow Rate, ACFM	196439
Actual Stack Gas Flow Rate, (Dry) ACFMD	165009
Stack Gas Flow Rate (Standard conditions), SCFMD	134670
Stack Gas Flow Rate (Standard conditions), SCFMW	160321

Ambient Air Services, Inc.
Environmental Consultants

106 Ambient Air Way
 Starke, Florida 32091

(904) 964 - 8440
 (904) 964 - 6675 fax

Volumetric Air-Flow Rates

Plant	Florida Rock		
Location	Newberry, Fl		
Stack	Cement Kiln		
Run Date	9/23/00		
Run Number	3	Volume Metered	0
Start Time	15:20	Meter Temp (Deg R)	
Finish Time	15:28	Orsat CO2 %	15
Barometric Pressure	29.95	Orsat O2 %	13
Stack Diameter (in.)	112	Orsat CO %	0
Stack Area sq. ft.	68.417	Orsat N %	72
Number of Points	12	Condensate Volume	
Avg of SQRT of V.H.	0.7787	Delta H (inches H2O)	
Meter Correction (Y)	0	Stack Pressure	30.35
Pitot Correction Factor	0.84	Stack Temp (Deg R)	658.8

=====

Moisture in stack gas, volume fraction	0.160
Dry Stack Gas, volume fraction	0.840
Molecular Weight of Stack Gas (Dry Basis)	30.92
Molecular Weight of Stack Gas (Stack conditions)	28.85
Specific gravity of Stack Gas Relative to Air	0.995
Excess Air (%)	
Average Stack Velocity, FPM	2907.8
Actual Stack Gas Flow Rate, ACFM	198943
Actual Stack Gas Flow Rate, (Dry) ACFMD	167112
Stack Gas Flow Rate (Standard conditions), SCFMD	135858
Stack Gas Flow Rate (Standard conditions), SCFMW	161736

FIELD DATA SHEETS

Florida Rock - Newberry, Florida
 Report of Compliance Test - Total Hydrocarbons
 Run 1 - Data

Date/Time	Flow (scfmw)	THC (ppm)	THC (lb/hr)	Methane (ppm)	Methane (lb/hr)
9/23/00 11:25	159518	10.23	11.18	9.54	3.80
9/23/00 11:26	159518	10.29	11.25	9.76	3.88
9/23/00 11:27	159518	10.34	11.31	10.14	4.03
9/23/00 11:28	159518	10.44	11.42	10.24	4.07
9/23/00 11:29	159518	10.35	11.32	10.39	4.13
9/23/00 11:30	159518	10.24	11.20	10.39	4.13
9/23/00 11:31	159518	10.09	11.03	10.36	4.12
9/23/00 11:32	159518	10.23	11.18	10.21	4.06
9/23/00 11:33	159518	10.16	11.12	9.95	3.96
9/23/00 11:34	159518	10.15	11.10	9.95	3.96
9/23/00 11:35	159518	10.36	11.33	10.21	4.06
9/23/00 11:36	159518	10.45	11.43	10.39	4.13
9/23/00 11:37	159518	10.43	11.40	10.39	4.13
9/23/00 11:38	159518	10.41	11.39	10.53	4.19
9/23/00 11:39	159518	10.29	11.25	10.53	4.19
9/23/00 11:40	159518	10.39	11.36	10.60	4.22
9/23/00 11:41	159518	10.50	11.49	10.53	4.19
9/23/00 11:42	159518	10.56	11.55	9.95	3.96
9/23/00 11:43	159518	10.85	11.87	10.49	4.17
9/23/00 11:44	159518	10.76	11.77	10.29	4.09
9/23/00 11:45	159518	10.83	11.84	10.21	4.06
9/23/00 11:46	159518	10.86	11.88	10.42	4.14
9/23/00 11:47	159518	10.73	11.73	10.68	4.25
9/23/00 11:48	159518	10.74	11.75	10.36	4.12
9/23/00 11:49	159518	11.00	12.03	10.75	4.28
9/23/00 11:50	159518	8.60	9.41	11.08	4.41
9/23/00 11:51	159518	9.41	10.30	10.39	4.13
9/23/00 11:52	159518	9.55	10.45	10.10	4.02
9/23/00 11:53	159518	9.55	10.45	10.10	4.02
9/23/00 11:54	159518	9.40	10.28	9.98	3.97
9/23/00 11:55	159518	9.34	10.21	9.88	3.93
9/23/00 11:56	159518	9.65	10.56	10.53	4.19
9/23/00 11:57	159518	9.64	10.54	10.31	4.10
9/23/00 11:58	159518	9.78	10.69	10.17	4.04
9/23/00 11:59	159518	10.05	10.99	10.14	4.03
9/23/00 12:00	159518	9.98	10.91	10.29	4.09
9/23/00 12:01	159518	9.79	10.71	10.82	4.30
9/23/00 12:02	159518	9.86	10.79	10.05	4.00
9/23/00 12:03	159518	9.86	10.79	9.84	3.91
9/23/00 12:04	159518	9.80	10.72	10.02	3.99
9/23/00 12:05	159518	9.83	10.75	9.52	3.78
9/23/00 12:06	159518	9.94	10.87	10.02	3.99
9/23/00 12:07	159518	10.00	10.94	9.91	3.94
9/23/00 12:08	159518	10.15	11.10	9.81	3.90
9/23/00 12:09	159518	10.11	11.06	9.81	3.90
9/23/00 12:10	159518	10.41	11.39	10.24	4.07
9/23/00 12:11	159518	10.49	11.47	10.75	4.28
9/23/00 12:12	159518	10.59	11.58	10.97	4.36
9/23/00 12:13	159518	10.51	11.50	10.99	4.37
9/23/00 12:14	159518	10.46	11.44	11.11	4.42
9/23/00 12:15	159518	10.44	11.42	10.49	4.17
9/23/00 12:16	159518	10.61	11.61	10.99	4.37
9/23/00 12:17	159518	10.45	11.43	11.36	4.52
9/23/00 12:18	159518	10.51	11.50	11.28	4.49
9/23/00 12:19	159518	10.35	11.32	11.69	4.65
9/23/00 12:20	159518	10.24	11.20	11.57	4.60
9/23/00 12:21	159518	10.39	11.36	11.86	4.72
9/23/00 12:22	159518	10.28	11.24	12.16	4.84
9/23/00 12:23	159518	10.41	11.39	11.69	4.65
9/23/00 12:24	159518	10.09	11.03	11.57	4.60
9/23/00 12:25	159518	9.78	10.69	11.28	4.49

Florida Rock - Newberry, Florida
 Report of Compliance Test - Total Hydrocarbons
 Run 2 - Data

Date/Time	Flow (scfmw)	THC (ppm)	THC (lb/hr)	Methane (ppm)	Methane (lb/hr)
9/23/00 13:45	160321	10.5	11.52	9.89	3.95
9/23/00 13:46	160321	10.3	11.28	9.74	3.89
9/23/00 13:47	160321	10.5	11.50	9.55	3.82
9/23/00 13:48	160321	10.5	11.57	9.55	3.82
9/23/00 13:49	160321	10.7	11.72	9.74	3.89
9/23/00 13:50	160321	10.4	11.46	9.89	3.95
9/23/00 13:51	160321	10.6	11.60	9.77	3.91
9/23/00 13:52	160321	10.6	11.60	10.35	4.14
9/23/00 13:53	160321	10.6	11.61	10.75	4.30
9/23/00 13:54	160321	10.5	11.54	10.35	4.14
9/23/00 13:55	160321	10.4	11.42	10.46	4.18
9/23/00 13:56	160321	8.3	9.07	10.29	4.11
9/23/00 13:57	160321	8.8	9.69	10.15	4.06
9/23/00 13:58	160321	9.4	10.28	10.15	4.06
9/23/00 13:59	160321	9.9	10.84	10.63	4.25
9/23/00 14:00	160321	9.9	10.92	10.75	4.30
9/23/00 14:01	160321	10.0	10.98	10.53	4.21
9/23/00 14:02	160321	10.0	10.98	10.29	4.11
9/23/00 14:03	160321	10.1	11.06	10.17	4.07
9/23/00 14:04	160321	10.1	11.06	10.17	4.07
9/23/00 14:05	160321	10.2	11.19	9.96	3.98
9/23/00 14:06	160321	10.1	11.13	9.96	3.98
9/23/00 14:07	160321	10.3	11.31	10.03	4.01
9/23/00 14:08	160321	10.3	11.27	10.03	4.01
9/23/00 14:09	160321	10.3	11.27	10.78	4.31
9/23/00 14:10	160321	10.4	11.39	10.32	4.12
9/23/00 14:11	160321	10.3	11.34	10.17	4.07
9/23/00 14:12	160321	10.2	11.24	10.75	4.30
9/23/00 14:13	160321	10.2	11.25	10.32	4.12
9/23/00 14:14	160321	10.2	11.23	9.99	3.99
9/23/00 14:15	160321	10.3	11.28	9.89	3.95
9/23/00 14:16	160321	10.3	11.34	9.81	3.92
9/23/00 14:17	160321	10.6	11.61	9.60	3.84
9/23/00 14:18	160321	10.4	11.46	10.25	4.10
9/23/00 14:19	160321	10.5	11.54	10.03	4.01
9/23/00 14:20	160321	10.5	11.49	9.77	3.91
9/23/00 14:21	160321	10.4	11.41	9.63	3.85
9/23/00 14:22	160321	10.6	11.65	10.03	4.01
9/23/00 14:23	160321	10.7	11.71	10.29	4.11
9/23/00 14:24	160321	10.6	11.68	10.46	4.18
9/23/00 14:25	160321	10.4	11.39	10.49	4.19
9/23/00 14:26	160321	10.5	11.54	10.17	4.07
9/23/00 14:27	160321	11.4	12.49	9.74	3.89
9/23/00 14:28	160321	10.9	11.97	10.32	4.12
9/23/00 14:29	160321	10.7	11.78	10.49	4.19
9/23/00 14:30	160321	10.6	11.68	10.35	4.14
9/23/00 14:31	160321	10.7	11.80	10.61	4.24
9/23/00 14:32	160321	10.8	11.90	10.25	4.10
9/23/00 14:33	160321	11.0	12.04	10.71	4.28
9/23/00 14:34	160321	11.1	12.20	10.96	4.38
9/23/00 14:35	160321	11.0	12.11	10.32	4.12
9/23/00 14:36	160321	10.8	11.87	10.61	4.24
9/23/00 14:37	160321	10.8	11.85	10.22	4.08
9/23/00 14:38	160321	10.7	11.76	10.22	4.08
9/23/00 14:39	160321	10.6	11.69	10.39	4.15
9/23/00 14:40	160321	10.9	12.02	9.89	3.95
9/23/00 14:41	160321	11.0	12.11	9.89	3.95
9/23/00 14:42	160321	11.0	12.07	9.89	3.95
9/23/00 14:43	160321	10.5	11.56	9.89	3.95
9/23/00 14:44	160321	10.4	11.41	9.89	3.95
9/23/00 14:45	160321	10.3	11.32	9.45	3.78

Florida Rock - Newberry, Florida
 Report of Compliance Test - Total Hydrocarbons
 Run 3 - Data

Date/Time	Flow (scfmw)	THC (ppm)	THC (lb/hr)	Methane (ppm)	Methane (lb/hr)
9/23/00 15:10	161736	10.4	11.53	10.42	4.20
9/23/00 15:11	161736	10.525	11.67	10.71	4.32
9/23/00 15:12	161736	10.5125	11.66	10.46	4.22
9/23/00 15:13	161736	10.45	11.59	10.35	4.17
9/23/00 15:14	161736	10.45	11.59	10.39	4.19
9/23/00 15:15	161736	11.2375	12.46	10.53	4.25
9/23/00 15:16	161736	11.35	12.59	10.75	4.34
9/23/00 15:17	161736	11.05	12.25	11.35	4.58
9/23/00 15:18	161736	11.1	12.31	11.64	4.69
9/23/00 15:19	161736	11.2125	12.44	11.54	4.65
9/23/00 15:20	161736	11.2125	12.44	11.21	4.52
9/23/00 15:21	161736	11.0875	12.30	11.18	4.51
9/23/00 15:22	161736	11.0375	12.24	10.56	4.26
9/23/00 15:23	161736	10.9375	12.13	10.71	4.32
9/23/00 15:24	161736	10.3875	11.52	10.56	4.26
9/23/00 15:25	161736	10.1875	11.30	9.89	3.99
9/23/00 15:26	161736	10.225	11.34	9.74	3.93
9/23/00 15:27	161736	10.0625	11.16	10.29	4.15
9/23/00 15:28	161736	9.85	10.92	10.03	4.05
9/23/00 15:29	161736	10.2	11.31	9.45	3.81
9/23/00 15:30	161736	10.4	11.53	9.45	3.81
9/23/00 15:31	161736	10.6125	11.77	9.84	3.97
9/23/00 15:32	161736	10.7375	11.91	10.10	4.07
9/23/00 15:33	161736	11.25	12.48	10.35	4.17
9/23/00 15:34	161736	12.3625	13.71	10.75	4.34
9/23/00 15:35	161736	12.325	13.67	12.93	5.22
9/23/00 15:36	161736	11.575	12.84	12.35	4.98
9/23/00 15:37	161736	12.225	13.56	12.11	4.88
9/23/00 15:38	161736	11.8875	13.18	12.25	4.94
9/23/00 15:39	161736	10.175	11.28	12.93	5.22
9/23/00 15:40	161736	10.4125	11.55	12.64	5.10
9/23/00 15:41	161736	10.5	11.64	12.71	5.12
9/23/00 15:42	161736	10.5	11.64	12.39	5.00
9/23/00 15:43	161736	10.7625	11.94	11.85	4.78
9/23/00 15:44	161736	11.9375	13.24	12.93	5.22
9/23/00 15:45	161736	11.3375	12.57	13.60	5.48
9/23/00 15:46	161736	10.95	12.14	12.18	4.91
9/23/00 15:47	161736	10.8625	12.05	10.89	4.39
9/23/00 15:48	161736	10.9375	12.13	11.35	4.58
9/23/00 15:49	161736	11.05	12.25	11.08	4.47
9/23/00 15:50	161736	11.125	12.34	11.15	4.50
9/23/00 15:51	161736	11.3375	12.57	11.04	4.45
9/23/00 15:52	161736	11.375	12.62	10.92	4.40
9/23/00 15:53	161736	10.8625	12.05	11.89	4.80
9/23/00 15:54	161736	10.6375	11.80	10.92	4.40
9/23/00 15:55	161736	10.325	11.45	10.92	4.40
9/23/00 15:56	161736	10.325	11.45	10.71	4.32
9/23/00 15:57	161736	10.1625	11.27	9.89	3.99
9/23/00 15:58	161736	10.875	12.06	10.03	4.05
9/23/00 15:59	161736	10.7	11.87	10.68	4.31
9/23/00 16:00	161736	10.6625	11.83	10.61	4.28
9/23/00 16:01	161736	10.8625	12.05	10.25	4.13
9/23/00 16:02	161736	11.075	12.28	10.46	4.22
9/23/00 16:03	161736	11.0875	12.30	10.75	4.34
9/23/00 16:04	161736	11.1375	12.35	10.61	4.28
9/23/00 16:05	161736	11.0125	12.21	10.53	4.25
9/23/00 16:06	161736	10.6375	11.80	10.61	4.28
9/23/00 16:07	161736	10.7	11.87	10.17	4.10
9/23/00 16:08	161736	10.8	11.98	10.39	4.19
9/23/00 16:09	161736	10.6625	11.83	10.46	4.22
9/23/00 16:10	161736	10.8	11.98	10.53	4.25

Leave House @ 7:00

page 1

9/23 Arrive @ Plant @ 7:45

9/23 Pre Run 1 Calibration

Time	Inject	Response Methane	Response THC
8:11	zero air	0.0 Volts	0.0 ppm
8:58 8:44	84.3 Meth	8.235 Volts	47.8 ppm
8:47	47.3 Meth	3.685 Volts	26.3 ppm
8:53	30.0 Meth	Volts	ppm
9:08	46.13 Pro	0.012 Volts	45.5 ppm
9:10	29.0 Pro	0.0 Volts	29.0 ppm
	11.70 Pro	Volts	ppm

9:20	46.13 Pro	0.0 Volts	46.3 ppm
9:22	29.0 Pro	0.0 V	29.6 ppm
9:24	11.7 Pro	0.0 V	11.0 ppm

9:27	46.13 Pro	0.0 V	46.7 ppm
9:29	29.0 Pro	0.0 V	29.8 ppm
9:31	11.7 Pro	0.0 V	11.1 ppm

9:40-9:44	84.3 Meth	≈ 8.1 V	
9:46-9:48	47.3 Meth	≈ 3.7 V	
9:50-9:53	30.0 Meth	≈ 1.9 V	14.4 ppm

9/23 Response Time

	Response	Response Time
84.3		
46.13P	46.8 ppm	1 min 33 sec
84.13M	7.9 V	1 min 22 sec
46.13P	47.2 ppm	1 min 15 sec
84.3M	8.17 V	1 min 11 sec
46.13P	8.17 8.11 ppm	1 min 20 sec
84.3M	8.03 V	1 min 30 sec

CAL Total VOC

Time	Inj:	Response
10:10 10:08	zero air	0.0 ppm
10:13	46.13	46.7 ppm
10:16	29.0	29.9 ppm
10:18	11.7	11.0 ppm

Finish Cals @ ~~10:33~~ 10:38

Begin Run 1 @ ~~10:40~~ 10:45

9/23 Calibrations for Methane

Time	Inject	Response	Methane
10:54	Zero air	0.0	Volts
10:53 → 10:58	89.3 M	7.9	Volts
11:02 → 11:07	47.3 M	3.6	Volts
11:09 → 11:12	30.0 M	2.1	Volts

→ Begin Run 1 @ 11:25
 → END Run 1 @ 12:25

Drift Check

Time	Inject	Resp. THC	Resp. Methane
12:30	Zero Air	0.0 ppm	0.0 Volt
12:42	47.3 Meth		3.7 Volts
12:39	29.0 46.13 Pro	30.2 ppm	

9/23

page 4

→ Pre Cal for Run 2

Time	Inject	Response VOC	Response Meth
12:58	zero air	0.0 PPM	0.0 Volts
13:05	46.13 Pro	46.6 PPM	
13:08	29.0 Pro	29.7 PPM	
13:11	11.7 Pro	11.0 11.2 PPM	
13:15	84.3 Meth		7.6 Volts
13:20	47.3 Meth		3.6 Volts
13:24	30.0 Meth		2.1 Volts

→ Begin Run 2 @ 13:45

→ End Run 2 @ 14:45

Post Run 2 Drift Check

Time	Inj	Resp VOC	Resp Meth
14:52	zero air	0.0 Pro	0.0
14:55	29.0 Pro	30.4 Pro	
14:59	47.3 Meth		3.6 Volts

→ Begin Run 3 @ ~~15:00~~ 15:10

→ END Run 3 @ 16:10

Post Run 3 Drift Check

Time	Inj.	Resp VOC	Resp Meth
16:14	zero air	0.0 PPM	0.0 Volts
16:18 16:18 ^{OK}	29.0 Pro	31.7 28.7	3.7 Volts
16:19	47.3 Meth	3	3.7 Volts

9/23/03

page 5

Calibration for Continuous Data

Time	Inject	Response IHC
17:35	zero air	0.0
17:37	46.13	47.4
17:40	29.0	30.3
17:44	11.7	11.6

9/23 On line @ 17:50

Leave @ 18:00 home @ 18:35

leave house @ 7:45

9/25 Arrive @ Plant @ 8:30

Calibration + Data Check

Time	Inject	Response	Adjustment
8:43	zero air	0.1	0.0
8:48	46.13	45.4	46.1
8:52	29.0	29.4	29.4
8:55	11.7		11.4

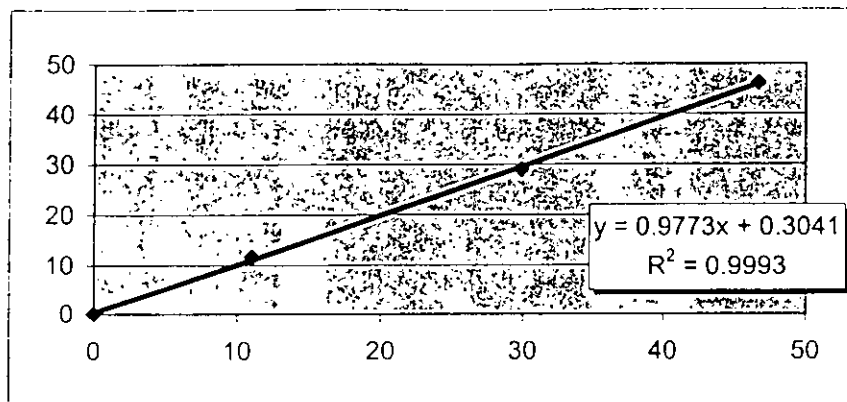
9/25 On line @ 9:00

INSTRUMENT CALIBRATIONS
AND
CALIBRATION GAS CERTIFICATIONS

VOC Calibration - Run #1

9/23/00

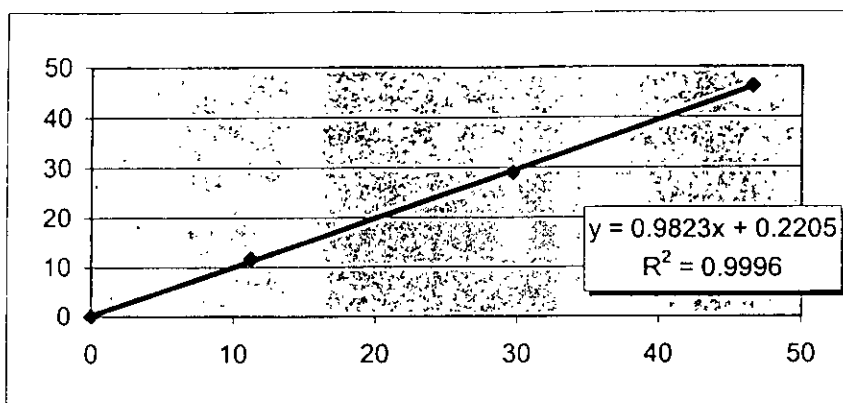
Response thc(ppm)	Inject thc (ppm)	calibration error %	post test response	% drift
0	0		0	0
46.7	46.13	1.24		
29.9	29	3.10	30.2	0.6
11	11.7	-5.98		



VOC Calibration - Run #2

9/23/00

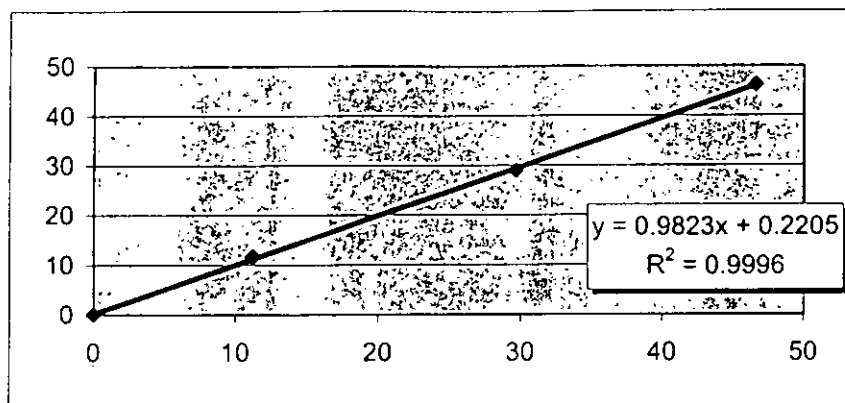
Response thc(ppm)	Inject thc (ppm)	calibration error %	post test response	% drift
0	0		0	0
46.6	46.13	1.02		
29.7	29	2.41	30.4	1.4
11.2	11.7	-4.27		



VOC Calibration - Run #3

9/23/00

Response thc(ppm)	Inject thc (ppm)	calibration error %	post test response	% drift
0	0		0	0
46.6	46.13	1.02		
29.7	29	2.41	28.7	-2
11.2	11.7	-4.27		



AMBIENT AIR SERVICES, INC.

MAGNEHELIC CALIBRATION FORM

MAGNEHELIC ID NO. R-85

MANOMETER ID NO. IN-3

NAME OF PRIMARY USER Florida Rock - Newberry

DATE 10-4-00

CALIBRATOR D. Skelton

RECAL. DATE _____

MANOMETER (INCHES WATER)	MAGNEHELIC (INCHES WATER)		% DIFFERENCE [(DISPLAYED VALUE - AUDIT VALUE) / AUDIT VALUE] x 100
	POSITIVE	NEGATIVE	
0.20	0.20	0.20	0.0% / 0.0%
0.40	0.39	0.40	-2.5% / 0.0%
0.60	0.60	0.60	0.0% / 0.0%
0.80	0.79	0.80	-1.3% / 0.0%
1.0	1.00	1.00	0.0% / 0.0%

AVERAGE PERCENT DIFFERENCE ^{Positive} -0.76% ^{negative} / 0.0%

SIGNATURE David Skelton

AMBIENT AIR SERVICES, INC.
106 Ambient Air Way
Starke, Florida

THERMOCOUPLE CALIBRATION FORM

Date 4-27-00 Time 1300-1312 Standard Thermometer Type ATKINS Platinum RTD
 Ambient Temperature 85°F Source Lab Manufacturer ATKINS model 36036-C
 Barometric Pressure 29.92 Source Lab Serial Number 2008
 Technician's Signature J. Hunter Pyrometer Manufacturer Atkins Model 39658-1K
 Serial Number B 002 Meter Box

TEMPERATURE SOURCE (A)		Crushed Ice			Ambient tap H ₂ O			Boiling H ₂ O					
REFERENCE THERMOMETER	Actual Reading	32.6°F			74.3°F			213°F					
	Corrected Temperature												
CALIBRATED THERMOCOUPLE		Indicated Temp.	Difference (B)	Percent Diff. (C)	Indicated Temp.	Difference	Percent Diff.	Indicated Temp.	Difference	Percent Diff.	Indicated Temp.	Difference	Percent Diff.
Serial Number	Location												
	Stack	32.3	+0.3	0.9	74.5	+0.2	-0.3	215°F	+2.0	-0.9			
	Filter												
	Impinger												
	Meter In												
	Meter Out												

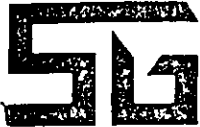
Comments:

Calibration Tolerances Stack = 1.5% of value, Filter Box = ±5.4°F, Impinger = ±2°F, Meter = ±5.4°F (40CFR Pt 60, App. A Method 5, and QA Handbook Section 3.4, Method 5, page 13, Rev. O)

(A) Type of calibration system used (B) Reference - Indicated = Difference

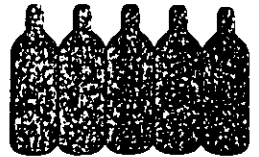
(C)
$$\left[\frac{(\text{ref. temp. } ^\circ\text{F} + 460) - (\text{indicated temp. } ^\circ\text{F} + 460)}{(\text{reference temp. } ^\circ\text{F} + 460)} \right] \times 100$$

ZERO AIR



SPECTRA GASES

277 Coit St. • Irvington, NJ 07111 USA Tel.: (201) 372-2060 • (800) 932-0624 • Fax: (201) 372-8551
Shipped From: 80 Industrial Drive • Alpha, N.J. 08865



CERTIFICATE OF ANALYSIS

EPA PROTOCOL MIXTURE PROCEDURE #: G1

CUSTOMER: Ambient Air Service
SGI ORDER #: 134480
ITEM#: 1
P.O.#: 07079802

CYLINDER #: CC90775
CYLINDER PRES: 2000 PSIG
CGA OUTLET: 660

CERTIFICATION DATE: 7/20/98
EXPIRATION DATE: 7/20/2000

CERTIFICATION HISTORY

COMPONENT	DATE OF ASSAY	MEAN CONCENTRATION	CERTIFIED CONCENTRATION	ANALYTICAL ACCURACY
Sulfur Dioxide	7/13/98	49.93 ppm	49.9 ppm	+/- 1%
	7/20/98	49.86 ppm		

BALANCE Nitrogen

PREVIOUS CERTIFICATION DATES: None

REFERENCE STANDARDS

COMPONENT	SRM/NTRM#	CYLINDER#	CONCENTRATION
Sulfur Dioxide	NTRM-R81694	CC53339	96.0 ppm.

INSTRUMENTATION

COMPONENT	MAKE/MODEL	SERIAL #	DETECTOR	CALIBRATION DATE(S)
Sulfur Dioxide	Horiba VIA-510	851221093	NDIR	7/6/98

THIS STANDARD WAS CERTIFIED ACCORDING TO THE EPA PROTOCOL PROCEDURES.
DO NOT USE THIS STANDARD IF THE CYLINDER PRESSURE IS LESS THAN 150 PSIG.

ANALYST: Fred Pikula
FRED PIKULA

DATE: 7/20/98



Scott Specialty Gases
1750 EAST CLUB BLVD, DURHAM, NC 27704

CERTIFIED MASTER CLASS
Single-Certified Calibration Standard
Phone: 919-220-0803 Fax: 919-220-0808

CERTIFICATE OF ACCURACY: Certified Master Class Calibration Standard

Product Information

Project No.: 12-36342-019
Item No.: 12022711 PAL
P.O. No.: 2127

Cylinder Number: ALM035200
Cylinder Size: AL
Certification Date: 10/22/1999
Expiration Date: 10/22/2000

Customer

AIR CONSULTING & ENGRING
STEVE NECK
SUITE #4
2106 NW 67TH PLACE
GAINESVILLE, FL 32606

CERTIFIED CONCENTRATION

<u>Component Name</u>	<u>Concentration (Moles)</u>	<u>Accuracy (+/-%)</u>
METHANE AIR	30. PPM BALANCE	2

TRACEABILITY

Traceable To

NIST

APPROVED BY:


G BARTNETT

DATE:

102299

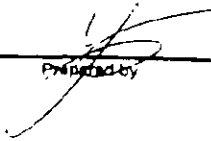


CERTIFICATE of ANALYSIS

Interference-Free Multi-Component EPA Protocol Gases

Cyl. Number: CC8274S	Cyl. Pressure: 1900 psig	Document Number: 3051055		
Assay Date: 07/29/99	Expiration Date: 07/28/02	Item Number:	Methane	50 ppm
Customer: Technical Services	P.O. Number: 072099JC	Notes:	Balance	Balance
Mixture is valid only to 150 psig				
Procedure: G-1				
AOAC Analytical uncertainty and NIST traceability are in compliance with EPA-600/R-97/123				
NTRM19	82750	44.2	ppm	0.4
SRM61	2751	98.6	ppm	0.1
CH4	Air	CC82920	02/01/03	99080108
CH4	Air	CAL-013500	05/08/03	312-B-27
Manufacturer: HP		Manufacturer:		Manufacturer:
Model Number: 8890		Model Number:		Model Number:
Serial Number: 8285		Serial Number:		Serial Number:
Analytical Principle: GC-FID		Analytical Principle:		Analytical Principle:
MPC Calibrated: 06/29/99		MPC Calibrated:		MPC Calibrated:

0.00	0.00	0.00	Component 1
15.35	15.09	15.37	
34.44	34.50	34.27	
16.42	16.29	16.35	
47.50	47.11	47.37	
Methane			


Prepared by 



CERTIFICATE of ANALYSIS

Interference-Free Multi-Component EPA Protocol Gases

Cyl. Number: CC92463	Cyl. Pressure: 1800 psig	Document Number: 3651A66	Methane		92.5 ppm	94.3 ±0.8 ppm					
Assay Date: 07/28/99	Expiration Date: 07/28/02	Item Number:	Ar		Balance	Balance					
Customer: Technical Services	P.O. Number: 372099JC	Notes:	Methane		92.5 ppm	94.3 ±0.8 ppm					
Mixture is valid only to 150 psig			Ar		Balance	Balance					
EPA Protocol, Section No. 3.1			REFERENCE STANDARDS EMPLOYED FOR ANALYSIS								
NOTE: Analytical uncertainty and NIST traceability are in compliance with EPA-800-R-97/123			SRM18	82750	44.2 ppm	0.4	CH4	Air	CC82913	02/01/03	9908C108
			SRM61	2751	98.6 ppm	0.1	CH4	Air	CAL-013500	05/08/03	312-B-27
Component 1: Methane Gas Analyzer Employed			Component 2: Nitrogen Gas Analyzer Employed			Component 3: Air Gas Analyzer Employed					
Manufacturer: HP			Manufacturer:			Manufacturer:					
Model Number: 8890			Model Number:			Model Number:					
Serial Number: 8295			Serial Number:			Serial Number:					
Analytical Principle: GC-FID			Analytical Principle:			Analytical Principle:					
MPC Calibrated: 06/29/99			MPC Calibrated:			MPC Calibrated:					
0.00			0.00			0.00					
15.35			15.09			15.37					
34.43			34.50			34.27					
29.52			29.22			29.30					
84.64			83.96			84.20					
Component 1			Methane								

Prepared by 

For Technical Information Call
1-800-752-1597



Air Products and Chemicals, Inc. • 12722 S. Wentworth Avenue, Chicago, IL 60628

ISO CERTIFICATION: 9002

CERTIFICATE OF ANALYSIS: EPA PROTOCOL GAS STANDARD

PERFORMED ACCORDING TO EPA TRACEABILITY PROTOCOL FOR ASSAY AND CERTIFICATION OF GASEOUS CALIBRATION STANDARDS (PROCEDURE #G1)

Customer:
AIR PRODUCTS & CHEMICALS, INC.
5837 W. 5TH STREET
JACKSONVILLE
FL 32254-1509

Order No: CSS-814080-01
Batch No: 861-42991
PQ:
Release:

Cylinder No: SG9163670BAL
Bar Code No: DRG073
Cylinder Pressure*: 2000 psig
Certification Date: 11/12/97
Expiration Date: 11/12/00

CERTIFIED CONCENTRATION		REFERENCE STANDARDS			ANALYTICAL INSTRUMENTATION			
Component	Certified Concentration	Cylinder Number	Standard Type	Standard Concentration	Instrument Make/Model	Serial Number	Last Calibration	Measurement Principal
PROpane	11.7±0.56 PPM	SG9128479BAL	GMIS	100.7 PPM	Gow-Mac 750	59405U	11/03/97	GC-FID

NITROGEN Balance Gas

* STANDARD SHOULD NOT BE USED BELOW 150 PSIG

Analyst:

Joseph Estafanous

Approved By:

Richard Fry

For Technical Information Call
1-800-752-1597



Air Products and Chemicals, Inc. * 12722 S. Wentworth Avenue, Chicago, IL 60628

ISO CERTIFICATION: 9002

CERTIFICATE OF ANALYSIS: EPA PROTOCOL GAS STANDARD

PERFORMED ACCORDING TO EPA TRACEABILITY PROTOCOL FOR ASSAY AND CERTIFICATION OF GASEOUS CALIBRATION STANDARDS (PROCEDURE #G1)

Customer:
AIR PRODUCTS AND CHEMICALS, INC.
4822 INDUSTRY LANE
UDI BUSINESS PARK
DURHAM NC 27709

Order No: SRP-094752-01
Batch No: 861-51836
PO:
Release: ↓ ↓

Cylinder No: SG9149220
Bar Code No: BLP626
Cylinder Pressure*: 2000 psig
Certification Date: 12/08/1998
Expiration Date: 12/08/2001

CERTIFIED CONCENTRATION		REFERENCE STANDARDS			ANALYTICAL INSTRUMENTATION			
Component	Certified Concentration	Cylinder Number	Standard Type	Standard Concentration	Instrument Make/Model	Serial Number	Last Calibration	Measurement Principal
PROPANE	29.0 ±.81 PPM	SG9128479BAL	GMIS	100.7 PPM	Gow-Mac 750	59405U	12/04/98	GC-FID

AIR Balance Gas
Oxygen Concentration 20.3 %

* STANDARD SHOULD NOT BE USED BELOW 150 PSIG

Analyst:

JULIAN K. SEGBAWU

Approved By:

James Laas

Airgas

Specialty Gases

Hamilton Blvd.
Dodgeville, AL 36582

P.O. Box 190969
Mobile, AL 36619

Phone: (334) 653-2500
FAX: (334) 653-2530

Certificate of Analysis: E.P.A. Protocol Gas Mixture

Cylinder No : CC13970
Cylinder Pressure: 2000 PSIG
Certification Date 4/7/00

Order No. 383678
Expiration Date: 4/7/03
Laboratory: ASG-MOBILE

Reference Standard Information:

<u>Type</u>	<u>Component</u>	<u>Cyl. Number</u>	<u>Concentration</u>
GMIS	PROPANE	CC49457	48.447PPM

Instrumentation:

Instrument/Model/Serial No.
SIEMENS FIDAMAT 5E-P K4-391

Analytical Principle
FID

Analytical Methodology does not require correction for analytical interferences.

Certified Concentrations:

<u>Component</u>	<u>Concentration</u>	<u>Accuracy</u>	<u>Procedure</u>
PROPANE	46.13 PPM	+/-1%	G1
AIR	Balance		

Analytical Results:

1st Component:

PROPANE

1st Analysis Date: 4/7/00

R	<u>48.46</u>	S	<u>46.13</u>	Z	<u>0.000</u>	Conc	<u>46.12</u>
S	<u>46.13</u>	Z	<u>0.000</u>	R	<u>48.45</u>	Conc	<u>46.13</u>
Z	<u>0.000</u>	R	<u>48.47</u>	S	<u>45.15</u>	Conc	<u>46.13</u>
						AVG:	<u>46.13</u>

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed.

Do not use cylinder below 150 psig.

Bridget H. Richardson
Approved for Release

PLANT OPERATING DATA

Florida Rock Industries, Inc.
 Cement Group
 Thompson S. Baker Cement plant

Process Weight Rate Sheet

Source: Kiln/Raw Mill Stack

Test Date: September 23, 2000

Permit No.: AC01-267311

Permitted Feed Rate: 149.9 TPH

Test Parameter(s): THC & Methane

	<u>Run Times</u>		<u>Process Input Rate</u>	
			<u>Kiln Feed</u>	<u>Coal Fired</u>
Run No. 1	<u>1125</u>	- <u>1225</u>	<u>140</u> TPH	<u>9.11</u> TPH
Run No. 2	<u>1345</u>	- <u>1445</u>	<u>140</u> TPH	<u>9.11</u> TPH
Run No. 3	<u>1510</u>	- <u>1610</u>	<u>140</u> TPH	<u>9.11</u> TPH

I here by certify that to the best of my knowledge the above data is true and correct.

George Townsend
Name (Print)

George Townsend
Signature

October 20, 2000
Date

Environmental & Safety Manager
Title

PROJECT PARTICIPANTS

PROJECT PARTICIPANTS

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

Project Advisor

AMBIENT AIR SERVICES, INC.

Craig Cohen

Field Test Crew

FLORIDA ROCK INDUSTRIES, INC.

George Townsend

Environmental & Safety Manager

