



Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

TO: Jonathan Hottom DATE: 6 Apr 04

DEPT: DARM FAX#: 850 922 6979

Number of Pages: 5 (including cover page)

FROM: Alan Zahn

PROGRAM: AIR RESOURCES MGMT SECTION Permitting

TELEPHONE # 407-893-3333, 3334
SC 325-3333, 3334

FAX #: 407-897-5963
SC 342-5963

COMMENTS:

Copy of Coastal Fuels CAM Plan response

30 day review end 28 April

Garnett Cloninger - (303) 626-8209

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

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Coastal Fuels Marketing, Inc.

A SUBSIDIARY OF TRANSMONTAIGNE

March 26, 2004

Mr. Alan Zahm
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

RECEIVED
MAR 29 2004
Central Mail - 1012

Re: *CAM Plan for Title V Renewal
Cape Canaveral Terminal (Permit No. 0090029-003-AV)
Coastal Fuels Marketing Inc.*

Dear Mr. Zahm,

Coastal Fuels Marketing Inc. (CFMI) owns and operates the Cape Canaveral Terminal, located in Cape Canaveral, Florida. The Title V permit, which this facility operates under, is currently being renewed. Please find attached the Compliance Assurance Monitoring (CAM) Plan for the Cape Canaveral Title V.

If you have any questions, or need further information, please call me at (303) 626-8209.

Sincerely,

COASTAL FUELS MARKETING INC.

Garrett Clemons
Environmental Analyst
Regulatory Compliance

Coastal Fuels Marketing, Inc.

370 17th Street • Suite 2750 • Denver, CO 80202-1373 • 303-626-8200 (phone) • 303-626-8228 (fax)
Mailing Address: • P.O. Box 5660 • Denver, CO 80217-5660
www.transmontaigne.com

| Indicator No. 1 | |
|---------------------------------------|---|
| I. Indicator | Presence of Flame |
| Monitoring Approach | Flame presence is monitored using a thermocouple. |
| II. Indicator Range | An excursion is defined when the thermocouple indicates that the flame is absent or below 300 degrees Fahrenheit during loading. |
| III. Performance Criteria | |
| A. Data Representativeness | The thermocouple is wired into the flare to detect the presence of the flame. |
| B. Verification of Operational Status | Loading occurs when the system is operational. |
| C. QA/QC Practices and Criteria | A validation check is conducted at least once each week. |
| D. Monitoring Frequency | The thermocouple operates continuously, when the VCU is operating |
| E. Data Collection Procedures | If the thermocouple detects a low pilot light temperature, loading cannot occur, which in turn will notify terminal personnel of a problem. |
| F. Averaging Period | NA |
| IV. Flare Bypass Monitoring | If the thermocouple notifies that the flame is absent during loading, an automatic shutoff occurs at the loading rack, making loading impossible. |

| Indicator No. 2 | |
|---------------------------------------|--|
| I. Indicator | Magnahelic Gauges readings. |
| Monitoring Approach | Magnahelic Gauges are used to verify that all vapor from loading operations are directed to the VCU (i.e no bypass of the collection system). |
| II. Indicator Range | An excursion is defined when the reading on the gauges is below 1.0 inches of water column during loading. Or when the reading of the gauge reaches 17.7 inches of water. If the pressure reaches 17.0 inches of water the loading rack immediately shuts down. The 17.0 inches of water reading serves as an early detection, keeping the pressure relief valve closed. |
| III. Performance Criteria | |
| A. Data Representativeness | The Magnahelic gauge is connected to the gas flow line. |
| B. Verification of Operational Status | The Magnahelic gauge is calibrated yearly, and the operation of this gauge is conducted in accordance with the manufacturer's recommendation. |
| | |

| | |
|---|---|
| C. QA/QC Practices and Criteria | Accuracy verification is done by reading the gauge, with a known pressure. This validation check would be conducted at least once each fiscal year. |
| D. Monitoring Frequency | It is checked daily and recorded weekly. |
| E. Data Collection Procedures | Terminal personnel manually record excursions. |
| F. Averaging Period | NA |
| IV. Collection System Bypass Monitoring | A bypass cannot occur. |

The Coastal Fuels Marketing Inc. (CFMI) Cape Canaveral terminal is a petroleum bulk storage facility located in Cape Canaveral, Florida. The facility currently stores gasoline, asphalt, 6 oil, and distillate products. The facility operates 52 weeks a year, 7 days a week, 8,760 hours per year. A Zeeco VCU rated at 35 mg/L controls emissions from the loading of gasoline.

Flame presence is monitored using a thermocouple. After a tanker truck is hooked up at the loading rack, a remote signal is sent to the VCU programmable logic controller (PLC) to automatically ignite the pilot flame. A trial for ignition period is started and continues until the thermocouple is proven. During this time the pilot gas solenoid and flame front generator solenoid are held open. When the pilot has proven, a permission to load signal is given to the load rack resulting in a permissive position. The RCM electro hydraulic fail-safe actuator receives the same permission to load signal and opens up a hydraulic valve that allows the vapors to proceed to the igniter.

CFMI has chosen to use a temperature range for the pilot light as the indicator that the VCU is running properly. Loading can not occur unless the pilot light on the VCU is at 300 F. CFMI has enclosed the latest testing information on the VCU, conducted on August 26, 2003. During this test the VCU was in normal operation, with the pilot light being at least 300 F. The VCU was rated at 9.01 mg/L, well under the permit limitation of 35 mg/L.

Each loading rack vapor recovery line has a maximum allowable vapor pressure of 17.7 inches of water. The maximum pressure observed during the last test was 3.5 inches of water. If the pressure should happen to reach 17.7 inches of water there is a pressure relief valve. However, the pressure will not reach 17.7 inches of water. If the pressure reaches 17.0 inches of water the loading rack immediately shuts down. Since the pressure relief valves are set to open at 17.7 inches of water, 17.0 inches of water serves as an early warning, therefore the pressure relief valve will not open. Terminal personnel manually monitor the pressure relief valves. A magnahelic gauge is also in place to measure the pressure. An automatic shut down is also associated with the magnahelic gauge.

If the pressure exceeds 17.0 inches of water the loading operations are automatically shutdown until the problem is corrected.

As mentioned above if the pilot light on the VCU goes below 300 degrees Fahrenheit the unit will automatically shut down. If the magnahelic gauge reads a pressure of 17.0 inches of water, loading is automatically shut down. Loading cannot occur at this facility unless the VCU is running properly. CFMI maintains written documentation of malfunctions that occur to the VCU, and corrective action.

Manufactures routine maintenance requirements include keeping the flame detection system adjusted for the smoothest, most reliable operation, and ensuring that the flame signal current is above the manufacturers minimum acceptable level.

Records relevant to the above requirements which are specified by the current Title V permit are maintained on site. Terminal personnel keep monthly records of the operational status of the VCU. This operational status includes: malfunctions, corrective actions, calibration reports, excursions, and maintenance.

Sent orig to Alan on 2/16/04



Coastal Fuels Marketing, Inc.
A SUBSIDIARY OF TRANSMONTAIGNE

January 28, 2004

Mr. Jonathan Holtom
Northwest District Branch Office
2815 Remington Green Circle
Suite A
Tallahassee, Florida 32308-1513

Re: *CAM Plan*
Title V Permit Renewal
Cape Canaveral Terminal
Coastal Fuels Marketing Inc.

Dear Mr. Holtom,

On January 7, 2004, Coastal Fuels Marketing Inc. (CFMI) received your letter requesting additional information for the CFMI Cape Canaveral CAM Plan. Please find attached the requested information to complete the CAM Plan.

If you have any questions, or need any further information, please call me at (303) 626-8209.

Sincerely,

COASTAL FUELS MARKETING INC.

Garrett Clemons
Environmental Analyst
Regulatory Compliance

RECEIVED
JAN 30 2004
BUREAU OF AIR REGULATION

JAN 29 2004
DEP TALLAHASSEE
BRANCH OFFICE

~~JAN 28 2004
DEP TALLAHASSEE
BRANCH OFFICE~~

Coastal Fuels Marketing, Inc.

1670 Broadway • Suite 3100 • Denver, CO 80202 • 303-626-8200 (phone) • 303-626-8228 (fax)
Mailing Address: • P.O. Box 5660 • Denver, CO 80217-5660
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Monitoring Approach Justification

I. Background and Applicability

The Coastal Fuels Marketing Inc. (CFMI) Cape Canaveral terminal is a petroleum bulk storage facility located in Cape Canaveral, Florida. The facility currently stores gasoline, asphalt, 6 oil, and distillate products. The facility operates 52 weeks a year, 7 days a week, 8,760 hours per year. A Zeeco VCU rated at 35 mg/L controls emissions from the loading of gasoline.

II. Monitoring Approach

Flame presence is monitored using a thermocouple. After a tanker truck is hooked up at the loading rack, a remote signal is sent to the VCU programmable logic controller (PLC) to automatically ignite the pilot flame. A trial for ignition period is started and continues for 5 minutes or until the thermocouple is proven. During this time the pilot gas solenoid and flame front generator solenoid are held open. When the pilot has proven, a permission to load signal is given to the load rack resulting in a permissive position. The RCM electro hydraulic fail-safe actuator receives the same permission to load signal and opens up a hydraulic valve that allows the vapors to proceed to the igniter.

Rationale for Monitoring

CFMI has chosen to use a temperature range as the indicator that the VCU is running properly. Loading can not occur unless the pilot light on the VCU is at 300 F. CFMI has enclosed the latest testing information on the VCU, conducted on August 26, 2003. During this test the VCU was in normal operation, with the pilot light being at least 300 F. The VCU was rated at 9.01 mg/L, well under the permit limitation of 35 mg/L.

Each loading rack vapor recovery line has a maximum allowable vapor pressure of 17.7 inches of water. The maximum pressure observed during the last test was 3.5 inches of water. If the pressure should happen to reach 17.7 inches of water there is a pressure relief valve. However, the pressure will not reach 17.7 inches of water. If the pressure reaches 17.0 inches of water the loading rack immediately shuts down. Since the pressure relief valves are set to open at 17.7 inches of water, 17.0 inches of water serves as an early warning, therefore the pressure relief valve will not open. Terminal personnel manually monitor the pressure relief valves. A magnahelic gauge is also in place to measure the pressure. An automatic shut down is also associated with the magnahelic gauge. If the pressure exceeds 17.0 inches of water the loading operations are automatically shutdown until the problem is corrected.

JAN 29 2004

DEP TALLAHASSEE
BRANCH OFFICE

Indicator Range

As mentioned above if the pilot light on the VCU goes below 300 degrees Fahrenheit the unit will automatically shut down. If the magnahelic gauge reads a pressure of 17.0 inches of water, loading is automatically shut down. Loading cannot occur at this facility unless the VCU is running properly. CFMI maintains written documentation of malfunctions that occur to the VCU, and corrective action.

Monitoring Frequency

The thermocouple operates continuously, when the VCU is operating.

QA/QC Procedures

Manufactures routine maintenance requirements include keeping the flame detection system adjusted for the smoothest, most reliable operation, and ensuring that the flame signal current is above the manufacturers minimum acceptable level.

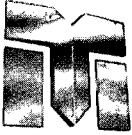
III. Record Keeping

Records relevant to the above requirements which are specified by the current Title V permit are maintained on site. Terminal personnel keep monthly records of the operational status of the VCU. This operational status includes: malfunctions, corrective actions, calibration reports, excursions, and maintenance.

IV. Periodic Reporting

Periodic reporting includes the following: date, time, duration of excursions, and corrective action.

JAN 29 2004
DEP TALLAHASSEE
BRANCH OFFICE



Coastal Fuels Marketing, Inc.
A SUBSIDIARY OF TRANSMONTAIGNE

December 11, 2003

Mr. Jonathan Holtom
Florida DEP
Northwest District Office
2815 Remington Green Circle
Suite A
Tallahassee, Florida 32308-1513

DEC 12 2003
DEP TALLAHASSEE
BRANCH OFFICE

*Re: Requested Information for CAM
Cape Canaveral Terminal (Project No. 0090029-006-AV)
Coastal Fuels Marketing Inc.*

Dear Mr. Holtom,

Coastal Fuels marketing Inc. (CFMI) owns and operates the Cape Canaveral terminal, located in Cape Canaveral, Florida. CFMI is currently renewing the Title V permit for this facility. On November 25, 2003, CFMI received a memorandum requesting more information to complete the Compliance Assurance Monitoring (CAM) Plan.

Please find attached the requested information. If you have any questions, or need further information, please call me at (303) 626-8209.

Sincerely,

COASTAL FUELS MARKETING INC.

A handwritten signature in black ink that reads "Garrett Clemons". The signature is written in a cursive, flowing style with a long, sweeping underline that extends to the right.

Garrett Clemons
Environmental Analyst
Regulatory Compliance

cc: Mr. Alan Zahm, Florida DEP Central District

Coastal Fuels Marketing, Inc.

1670 Broadway • Suite 3100 • Denver, CO 80202 • 303-626-8200 (phone) • 303-626-8228 (fax)
Mailing Address: • P.O. Box 5660 • Denver, CO 80217-5660
www.transmontaigne.com

Monitoring Approach Justification

I. Background

The Coastal Fuels Marketing Inc. (CFMI) Cape Canaveral terminal is a petroleum bulk storage facility located in Cape Canaveral, Florida. The facility currently stores gasoline, asphalt, 6 Oil, and distillate products. The facility operates 52 weeks a year, 7 days a week, 8,760 hours per year.

II. Rationale for Selection of Performance Indicators

CFMI has chosen to use a temperature range as the indicator that the VCU is running properly. The VCU will automatically shut down if the operating temperature goes below 750 degrees Fahrenheit. CFMI has enclosed the latest testing information on the VCU, conducted on August 26, 2003.

Each loading rack vapor recovery line has a maximum allowable vapor pressure of 17.7 inches of water. The maximum pressure observed during the last test was 3.5 inches of water. If the pressure should happen to exceed 17.7 inches of water there is a pressure relief valve. Terminal personnel manually monitor the pressure relief valves. A magnahelic gauge is also in place to measure the pressure. An automatic shut down is also associated with the magnahelic gauge. If the pressure exceeds 17.7 inches of water the loading operations are automatically shutdown until the problem is corrected.

III. Rationale for Selection of Indicator Ranges

As mentioned above if the operating temperature of the VCU goes below 750 degrees Fahrenheit the unit will automatically shut down. If the magnahelic gauge reads a pressure greater than 17.7 inches of water, loading is automatically shut down. Loading cannot occur at this facility unless the VCU is running properly. CFMI maintains written documentation of malfunctions that occur to the VCU, and corrective action.

**EMISSIONS TESTING
of the
COASTAL FUELS MARKETING, INC.
PORT CANAVERAL TERMINAL
VAPOR COMBUSTION UNIT
Port Canaveral, FL**

August 26, 2003

FDEP Permit No. 0090029-003-AV
SES Reference No. 03S301

Conducted by:

**SOUTHERN ENVIRONMENTAL SCIENCES, INC.
1204 North Wheeler Street
Plant City, Florida 33563
Phone (813) 752-5014 Fax (813) 752-2475**

Project Participants

**Kenneth M. Roberts
Mark S. Gierke
Terry L. Wilson
Dale A. Wingler**

EMISSIONS TESTING

**EMISSIONS TESTING
of the
COASTAL FUELS MARKETING, INC.
PORT CANAVERAL TERMINAL
VAPOR COMBUSTION UNIT**

Port Canaveral, FL

August 26, 2003

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1.0 INTRODUCTION

Southern Environmental Sciences, Inc. conducted a flare emissions test and visible emissions evaluation of the Coastal Fuels Marketing, Inc., Port Canaveral Terminal, Vapor Combustion Unit on August 26, 2003. This facility is located at Port Canaveral, Florida. Testing was performed to determine if the plant was operating in compliance with requirements of the Florida Department of Environmental Protection (FDEP). Mr. Thomas Mulligan of the FDEP was present as an observer during a portion of the test.

2.0 SUMMARY OF RESULTS

The flare was found to be in compliance with applicable emission limiting standards. Results of the test are summarized in Table 1. Emissions from the vapor collection system due to the loading of liquid product into gasoline tank trucks is limited to 35 milligrams of volatile organic compounds per liter of gasoline loaded. The emission rate during the test was 9.01 milligrams of volatile organic compounds per liter of gasoline loaded, within the allowable limit. The maximum allowable vapor system pressure, measured at each loading rack vapor recovery line is 17.7 inches of water. The maximum pressure observed during the test was 3.5 inches of water. A visual determination of fugitive emissions was performed over a two hour period. The accumulated emission time was zero minutes, well within the maximum limit of 5 minutes during any 2 consecutive hours.

TABLE 1. EMISSIONS TEST SUMMARY

Company: COASTAL FUELS - PORT CANAVERAL
 Source: VAPOR COMBUSTION UNIT

| | |
|---|-------------|
| Date of Test | 08/26/2003 |
| Start Time (24-hr. clock) | 0635 |
| End Time (24-hr. clock) | 1235 |
| Inlet Gas Volume (SCM) | 705 |
| Outlet Gas Volume (SCM) | 76,040 |
| Average Barometric Pressure (in. Hg.) | 30.06 |
| Average Static Pressure (in. H2O) | 0.7 |
| Average Meter Temperature (°F) | 90 |
| Gas Meter Correction Factor | 1 |
| Total Loading Positions | 3 |
| Total Trucks Checked | 13 |
| Trucks With Leaks | 0 |
| Trucks With No Leaks | 13 |
| Total Gasoline Dispensed (gallons) | 101,680 |
| Gasoline excluded Due to Leaks (gallons) | 0 |
| Total Countable Gasoline Dispensed (gallons) | 101,680 |
| Total Countable Gasoline Dispensed (liters) | 384,859 |
| | |
| Average VOC Inlet Concentration, (ppm, as propane) | 256,014 |
| Total mass of Inlet Hydrocarbons, (milligrams as carbon) | 364,003,677 |
| Average VOC Outlet Concentration, (ppm, as propane) | 21.5 |
| Average CO Outlet Concentration, (ppm) | 63.0 |
| Average CO2 Outlet Concentration, (%) | 0.8 |
| Total mass of Outlet Hydrocarbons, (milligrams as carbon) | 3,469,155 |
| Average Efficiency, (%) | 98.5 |
| | |
| Emission rate (mg/l) | 9.01 |
| Allowable Emission rate (mg/l) | 35 |

3.0 PROCESS DESCRIPTION

The Coastal Fuels Marketing, Inc., Port Canaveral Terminal truck loading facility controlled by this vapor combustion unit includes one loading rack. Trucks are bottom filled to reduce the amount of vapors generated. The displaced vapors are routed through an air assisted flare. The amount of product loaded during the testing period was monitored by Coastal Fuels personnel and is included in Table 1.

4.0 TESTING PROCEDURES

4.1 Methods

Flare testing and analyses were conducted in accordance with procedures described in 40 CFR 60.503 and 60.18. Volumetric flowrate at the inlet and outlet were determined in accordance with EPA Method 2B - Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators, 40 CFR 60, Appendix A-1. Hydrocarbon concentrations were measured at the inlet and outlet in accordance with EPA Method 25A - Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, 40 CFR 60, Appendix A-7. Carbon monoxide concentration was measured at the outlet in accordance with EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources, 40 CFR 60, Appendix A-4. Carbon dioxide was also measured at the outlet using procedures generally described in Method 10 by substituting carbon dioxide gas where the method called for carbon monoxide and omitting the silica gel and carbon dioxide absorbent tubes. The inlet total hydrocarbon analyzer, the carbon monoxide and the

carbon dioxide analyzers were calibrated with an EnviroNics Model 2020 gas dilution system and calibration gases using procedures described in EPA Method 205 - Verification of Gas Dilution Systems for Field Instrument Calibrations, 40 CFR 51, Appendix M. Trucks were checked for leaks using procedures described in EPA Method 21 - Determination of Volatile Organic Compound Emission Leaks, 40 CFR 60, Appendix A-7. The visual determination of fugitive emissions was performed in accordance with EPA Method 22 - Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares, 40 CFR 60, Appendix A-7.

4.2 Pretest Preparation

Prior to testing, an eight inch American Meter Company turbine meter was connected in line to measure the total volume of vapor reaching the flare. The vapor flare, terminal vapor recovery lines and testing ductwork were checked for leaks with a combustible gas detector. Any leaks detected were repaired prior to testing. Magnehelic gauges were connected at each loading rack to measure the vapor collection system pressure. Two Gastech Model GT 105 combustible-gas detectors were calibrated prior to the test with zero air and 2.5 percent methane calibration gas. Each analyzer was calibrated in accordance with the applicable test method immediately prior to the test.

4.3 Sampling Trains

The inlet Method 25A sampling train consisted of a dilution probe (100:1), a teflon

sample line, heated as necessary to prevent condensation, a California Analytical Model 300HFID(M) heated total hydrocarbon analyzer and a strip chart recorder. The Outlet Method 25A sampling train consisted of a heated stainless steel probe, heated teflon sample line, a California Analytical Model 300HFID(M) heated total hydrocarbon analyzer and a strip chart recorder. A schematic of the hydrocarbon sampling train is shown in Figure 1. The carbon monoxide sampling train consisted of a heated stainless steel probe, condenser, silica gel tube, carbon dioxide absorption tube, teflon sample line, and a Thermo Environmental Instruments, Inc. Model 48 Gas Filter Correlation CO analyzer. A schematic of the carbon monoxide sampling train is shown in Figure 2. The carbon dioxide sampling train consisted of a heated stainless steel sampling probe, condenser, teflon sample line and a California Analytical Model 100 carbon dioxide analyzer.

4.4 Data Collection

Inlet volume, temperature and static pressure measurements were recorded at the inlet to the meter at five minute intervals for the duration of the test to determine volume at standard conditions. Inlet and outlet hydrocarbon concentrations and outlet carbon monoxide and carbon dioxide concentrations were measured continuously throughout the six hour test period. During the testing each applicable tank truck was tested for leaks at all domes and boots. The probe of the gas meter

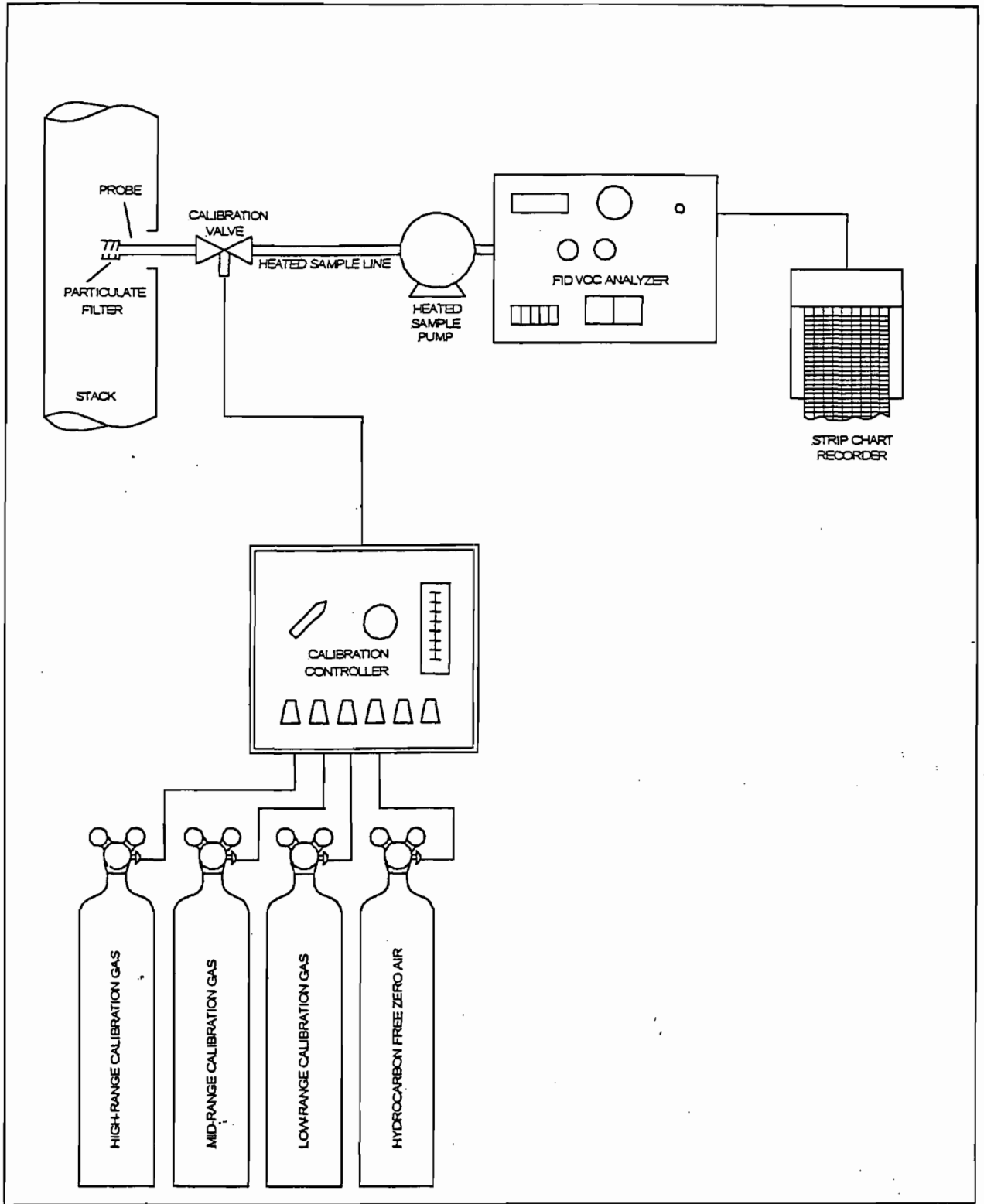


Figure 1. EPA Method 25A Sampling Train

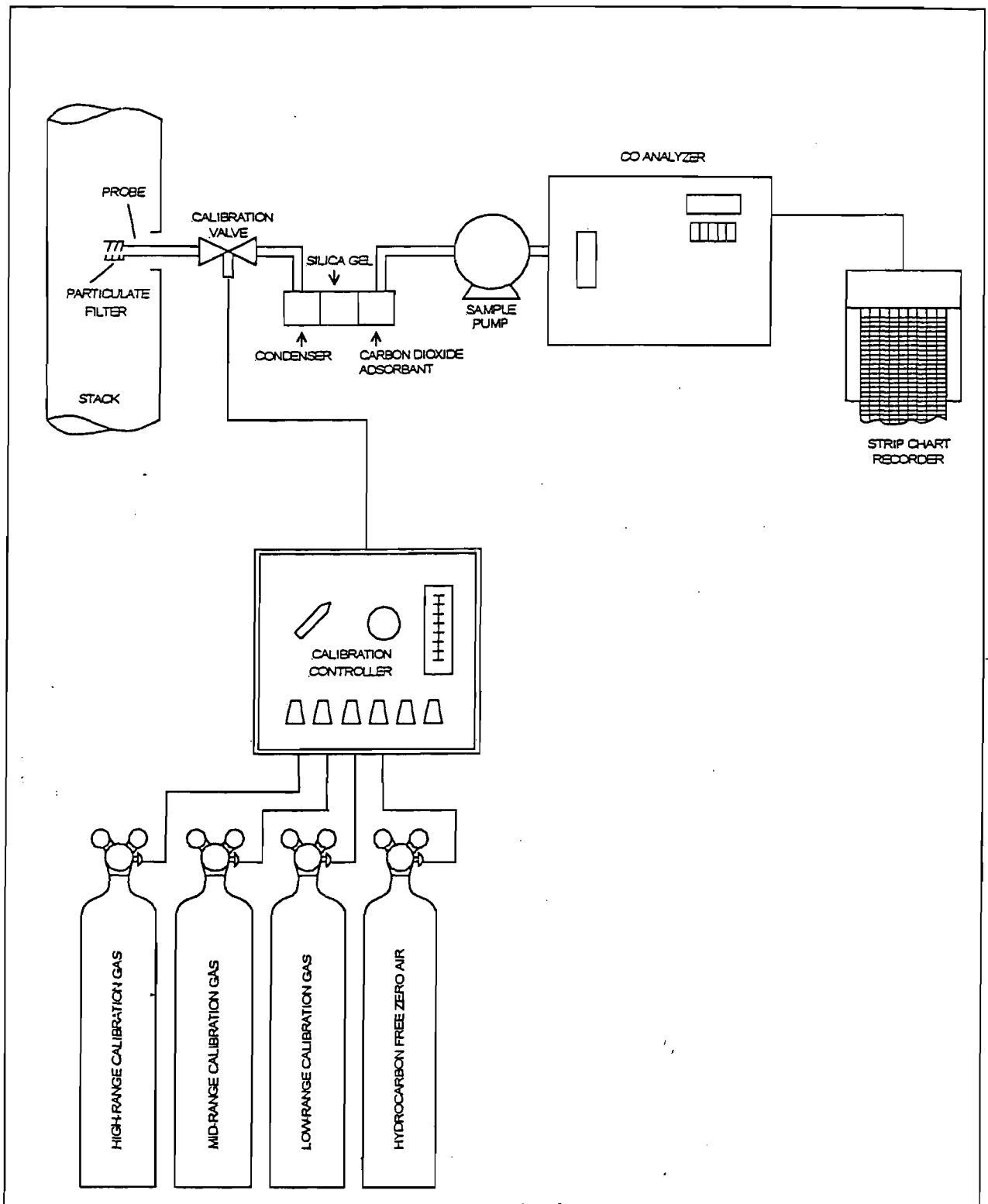


Figure 2. EPA Method 10 Sampling Train.

was held 2.5 centimeters from the potential leak source and probe movement was maintained at 2 centimeters per second. If an increase in concentration was noted at a possible leak, the probe was moved to locate the point of highest meter response. Leaks greater than or equal to 10,000 parts per million (as methane) were documented on field data sheets.

5.0 ANALYTICAL PROCEDURE

5.1 Analysis

Within 2 hours of the start of the test zero and high-level propane calibration gases were introduced into the hydrocarbon analyzers at the calibration valve assembly and the output was adjusted to the appropriate level if necessary. A linear regression was then conducted to calculate the predicted response for the low-level and mid-level gases. The low-level and mid-level gases were then introduced into the measurement system. The difference between the predicted and actual responses were calculated. A difference of less than 5 percent was considered acceptable. To assess the response time of the measurement system, zero gas was introduced into the system. After the output was stabilized, the high-level gas was quickly introduced. The time from the concentration change to the measurement system response equivalent to 95 percent of the step change was determined. The test was repeated three times. Results were recorded on the appropriate strip charts and are included in the appendix. Instrument calibrations were checked periodically during the test by introducing mid-range and zero gases into the instrument through the sampling train. The carbon

monoxide and carbon dioxide analyzers were calibrated immediately before the beginning of the test and checked periodically by introducing mid-range and zero gases into the instruments through the sampling trains.

5.2 Data Reduction

The outlet volume was determined in accordance with equations in EPA Method 2B. Hydrocarbon emissions were determined from the outlet hydrocarbon concentrations and the calculated outlet flowrate. The total countable gasoline loaded during the test was calculated by summing the total gasoline loaded then subtracting the total loaded into trucks on which leaks were encountered.

APPENDIX

Project Participants

Certification

Visual Determination of Fugitive Emissions

Laboratory Data

Field Data Sheets

Calculations and Equations

Strip Charts

Calibration Data

PROJECT PARTICIPANTS AND CERTIFICATION

COASTAL FUELS MARKETING, INC.
CAPE CANAVERAL TERMINAL
VAPOR COMBUSTION UNIT

Port Canaveral, FL

August 26, 2003

Project Participants:

Kenneth M. Roberts
Mark. S. Gierke
Terry L. Wilson
Dale A. Wingler

Conducted the field testing.

Dale A. Wingler

Performed the visual determination of fugitive emissions.

Kenneth M. Roberts

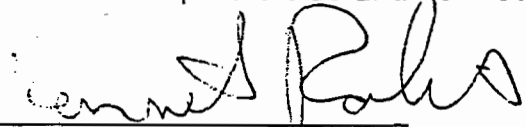
Computed test results.

Kenneth M. Roberts

Prepared the final test report.

Certification:

I certify that to my knowledge all data submitted in this report is true and correct.



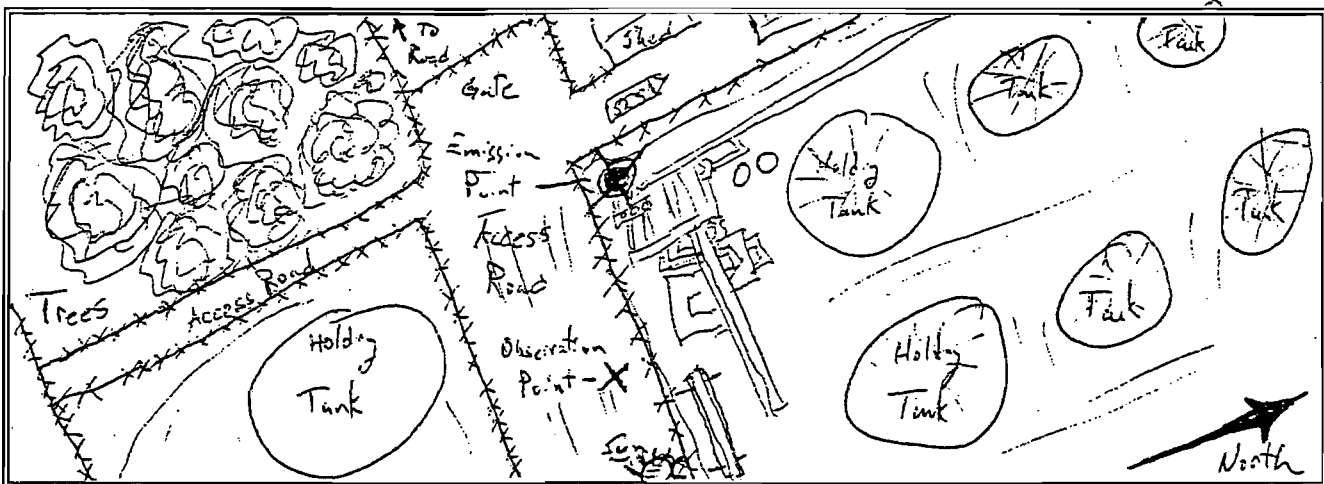
Kenneth M. Roberts, QEP

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

EPA METHOD 22
FUGITIVE OR SMOKE EMISSION INSPECTION
OUTDOOR LOCATION

| | | | |
|-------------|-------------------|----------------|-----------------|
| COMPANY | Coastal Fuels | DATE | 8/26/03 |
| UNIT | Port Canal | SKY CONDITIONS | Scattered |
| PERMIT NO. | 0090029-003-AV | PRECIPITATION | None |
| OBSERVER | Dale A. C. Dwyer | WIND DIRECTION | Variable |
| AFFILIATION | SFS | WIND SPEED | 0-3 |
| INDUSTRY | Gasoline Terminal | PROCESS UNIT | Submerged Flare |

Sketch process unit: indicate observer position relative to source and sun: indicate potential emission points and/or actual emission points.



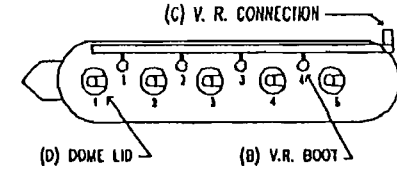
| OBSERVATIONS | CLOCK TIME | OBSERVATION PERIOD DURATION (MIN:SEC) | ACCUMULATED EMISSION TIME* (MIN:SEC) |
|-------------------|------------|---------------------------------------|--------------------------------------|
| BEGIN OBSERVATION | 0718-0738 | 20:00 | 00:00 |
| | 0743-0763 | 20:00 | 00:00 |
| | 0808-0828 | 20:00 | 00:00 |
| | 0833-0853 | 20:00 | 00:00 |
| | 0858-0918 | 20:00 | 00:00 |
| | 0923-0943 | 20:00 | 00:00 |
| | | | |
| | | | |
| | | | |
| END OBSERVATION | | | |

* Last reading indicates total duration of observed emissions for the test.

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

1204 N. WHEELER STREET □ PLANT CITY, FLORIDA □ 33566
 (813) 752-5014 □ FAX (813) 752-2475

①



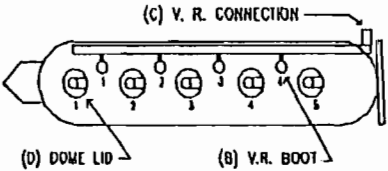
LEAK LOCATION DIAGRAM

| TRUCK LEAK CHECKS | | | |
|-------------------|----------------|---------------|---------|
| COMPANY | Coastal Fuels | DATE | 8/26/03 |
| LOCATION | Port Canaveral | OPERATOR(S) | DW/TW |
| FACILITY | Flare | INSTRUMENT(S) | GT105 |

| OWNER | TRUCK NO. | TIME | RACK NO. | LANE NO. | V.R. BACK PRESSURE (IN. H ₂ O) | GALLONS LOADED | PRODUCT | | NO LEAK | LEAK | LEAK LOCATION |
|-----------------------|-----------|------|----------|----------|---|----------------|-----------|-----------|---------|------|---------------|
| | | | | | | | THIS LOAD | PREV LOAD | | | |
| Florida Rack | 9772 | 0627 | / | 1 | 1.0 | 7500 | Diesel | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | | 2 | | | |
| | | | | | | | | 3 | | | |
| | | | | | | | | 4 | | | |
| | | | | | TOTAL | | | | | | |
| FleetWing | 141 | 0628 | / | 2 | 2.0 | 3800 | Diesel | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | | 2 | | | |
| | | | | | | | | 3 | | | |
| | | | | | | | | 4 | | | |
| | | | | | TOTAL | | | | | | |
| FleetWing | 143 | 0631 | / | 3 | 1.5 | 4160 | Diesel | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | | 2 | | | |
| | | | | | | | | 3 | | | |
| | | | | | | | | 4 | | | |
| | | | | | TOTAL | | | | | | |
| RC Dunn Mobil | 15 | 0651 | / | 2 | 1.5 | 5000 | Diesel | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | | 2 | | | |
| | | | | | | | | 3 | | | |
| | | | | | | | | 4 | | | |
| | | | | | TOTAL | | | | | | |
| Penn Tank Lines, Inc. | 9587 | 0708 | / | 1 | 1.5 | 7800 | Diesel | | | | |
| | | | | | | | | 1 | | | |
| | | | | | | | | 2 | | | |
| | | | | | | | | 3 | | | |
| | | | | | | | | 4 | | | |
| | | | | | TOTAL | | | | | | |

(2)

SOUTHERN ENVIRONMENTAL SCIENCES, INC.
 1204 N. WHEELER STREET □ PLANT CITY, FLORIDA □ 33566
 (813) 752-5014 □ FAX (813) 752-2475



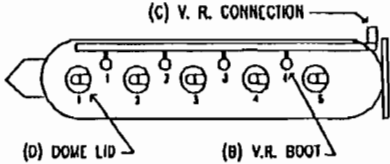
LEAK LOCATION DIAGRAM

| TRUCK LEAK CHECKS | | | |
|-------------------|--------------|---------------|---------|
| COMPANY | Castrol Fuel | DATE | 4/26/03 |
| LOCATION | Pet Center | OPERATOR(S) | DW/TW |
| FACILITY | Flare | INSTRUMENT(S) | GT105 |

| OWNER | TRUCK NO. | TIME | RACK NO. | LANE NO. | V.R. BACK PRESSURE (IN. H ₂ O) | GALLONS LOADED | PRODUCT | | NO LEAK | LEAK | LEAK LOCATION | |
|----------------|-----------|------|----------|----------|---|----------------|-----------|-----------|----------|------|---------------|--|
| | | | | | | | THIS LOAD | PREV LOAD | | | | |
| KINAM | 1303 | 0725 | / | 2 | 3.5 | 1 | 3100 | 87 | Gas | ✓ | | |
| | | | | | | 2 | 2400 | 23 | | | | |
| | | | | | | 3 | 2800 | Plus | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 8300 | | 5500 Gas | | | |
| RC DUNN | 15 | 0747 | / | 2 | 1.5 | 1 | 4682 | Diesel | Dies | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | | | | | | |
| Petro chemical | 6129 | 0800 | / | 3 | 2.5 | 1 | 8000 | 87 | Gas | ✓ | | |
| | | | | | | 2 | 1000 | 23 | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 9000 | | | | | |
| Fla Rock | RN 9935 | 0800 | / | 1 | 2.5 | 1 | 7000 | 87 | Dies | ✓ | | |
| | | | | | | 2 | 2000 | Dies | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 7000 | | | | | |
| PCT | 8443 | 0807 | / | 2 | 3.5 | 1 | | | | | | |
| | | | | | | 2 | 5000 | 87 | Gas | | | |
| | | | | | | 3 | 4000 | 87 | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 9000 | | | | | |

3

SOUTHERN ENVIRONMENTAL SCIENCES, INC.
 1204 N. WHEELER STREET □ PLANT CITY, FLORIDA □ 33566
 (813) 752-5014 □ FAX (813) 752-2475



LEAK LOCATION DIAGRAM

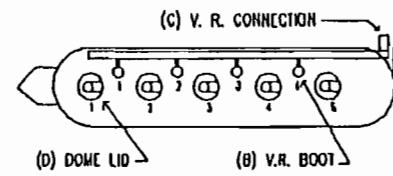
| TRUCK LEAK CHECKS | | | |
|-------------------|----------------|---------------|---------|
| COMPANY | Coastal Fuels | DATE | 8/26/03 |
| LOCATION | Port Canaveral | OPERATOR(S) | MO/TW |
| FACILITY | Flare | INSTRUMENT(S) | GT105 |

| OWNER | TRUCK NO. | TIME | RACK NO. | LANE NO. | V. R. BACK PRESSURE (IN. H ₂ O) | GALLONS LOADED | | PRODUCT | | NO LEAK | LEAK | LEAK LOCATION |
|---------------------------|-----------|-------------------------|----------|----------|--|----------------|------|-----------|-----------|---------|------|---------------|
| | | | | | | 1 | 2 | THIS LOAD | PREV LOAD | | | |
| Petro Chem. | 763994 | 0818 | / | 1 | 2.0 | 1 | 5000 | 87 | Gas | ✓ | | |
| | | | | | | 2 | 3000 | 87 | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 8000 | | | | | |
| Florida Rock & Tank Lines | 4772 | 0830 0853 | / | 22 | 2.5 | 1 | 8000 | Res | Diesel | ✓ | | |
| | | | | | | 2 | 1000 | 93 | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | 9000 | | | | | |
| | | | | | | TOTAL | | | | | | |
| PET | 6116 | 0904 | / | 3 | 2.0 | 1 | 7000 | 87 | Gas | ✓ | | |
| | | | | | | 2 | 1000 | 93 | | | | |
| | | | | | | 3 | 1000 | 89 | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 9000 | | | | | |
| Fly Rocket Tank Lines | 3370 | 0925 | / | 2 | 2.0 | 1 | 8000 | 89 | Gas | ✓ | | |
| | | | | | | 2 | 1000 | 93 | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | 9000 | | | | | |
| Glover Oil Co. | / | 0944 | / | 3 | 2.0 | 1 | | | | | | |
| | | | | | | 2 | 365 | 89 | Gas | | | |
| | | | | | | 3 | 1500 | 87 | Dies | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | | | | | | |

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

1204 N. WHEELER STREET □ PLANT CITY, FLORIDA □ 33566
(813) 752-5014 □ FAX (813) 752-2475

4.



LEAK LOCATION DIAGRAM

| TRUCK LEAK CHECKS | | | |
|-------------------|--|---------------|--|
| COMPANY | | DATE | |
| LOCATION | | OPERATOR(S) | |
| FACILITY | | INSTRUMENT(S) | |

| OWNER | TRUCK NO. | TIME | RACK NO. | LANE NO. | V.R. BACK PRESSURE (IN. H ₂ O) | GALLONS LOADED | | PRODUCT | | NO LEAK | LEAK | LEAK LOCATION |
|--------------------------------|-----------|--------------|----------|----------|---|----------------|------|-----------|-----------|---------|------|---------------|
| | | | | | | 1 | 2 | THIS LOAD | PREV LOAD | | | |
| Wilkins O-I Co. | 2 | 0950 | / | 1 | 2.0 | 1 | 4200 | Diesel | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | | | | | | |
| Petro-Chemical Transport, Inc. | 723948 | 1011 1021 | / | 2 | 2.0 | 1 | 7000 | Reg | ✓ | | | |
| | | | | | | 2 | 4800 | 5000 | From Reg | | | |
| | | | | | | 3 | 2500 | M.I.D | | | | |
| | | | | | | 4 | 1000 | From | | | | |
| | | | | | | TOTAL | — | 8500 | | | | |
| Kenan | 335 | 1011 | / | 3 | 2.0 | 1 | 7000 | Reg | ✓ | | | |
| | | | | | | 2 | 1900 | From | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | — | 8900 | | | | |
| Petro-Chemical Transport, Inc. | G129 | 1025 | / | 1 | 2.0 | 1 | 5000 | Reg | ✓ | | | |
| | | | | | | 2 | 4000 | M.I.D | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | r | | | | | |
| | | | | | | TOTAL | — | 9000 | | | | |
| Florida Rock & Tank Lines | RW 9935 | 1048 | / | 3 | 3.0 | 1 | 8000 | Reg | ✓ | | | |
| | | | | | | 2 | 800 | M.I.D | | | | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |
| | | | | | | TOTAL | — | 8800 | | | | |

PRODUCT DISPENSED

COMPANY: COASTAL FUELS - PORT CANAVERAL

FACILITY: FLARE

DATE: 08/26/2003

| LOCATION NO | METER NO | PRODUCT | PRODUCT INITIAL | PRODUCT FINAL | STATION | RACK TOTALS | |
|-------------|----------|---------|-----------------|---------------|---------|-------------|----------|
| | | | | | | DIESEL | GASOLINE |
| 1 | 1 | LSD | 53560230 | 53588731 | 28,501 | | |
| 2 | 1 | RNL | 76732857 | 76745567 | 12,710 | | |
| 3 | 1 | SNL | 4714431 | 4714431 | 0 | | |
| 4 | 1 | RNL | 69722250 | 69733550 | 11,300 | | |
| 4 | 2 | SNL | 4837832 | 4837832 | 0 | 28,501 | 24,010 |
| 5 | 1 | LSD | 45726247 | 45757210 | 30,963 | | |
| 6 | 1 | RNL | 66482028 | 66504530 | 22,502 | | |
| 7 | 1 | SNL | 18839350 | 18842750 | 3,400 | | |
| 8 | 1 | RNL | 59119623 | 59132650 | 13,027 | | |
| 8 | 2 | SNL | 3786399 | 3788475 | 2,076 | 30,963 | 41,005 |
| 9 | 1 | LSD | 13458561 | 13467896 | 9,335 | | |
| 10 | 1 | RNL | 85422765 | 85440566 | 17,801 | | |
| 11 | 1 | SNL | 23565467 | 23569470 | 4,003 | | |
| 12 | 1 | RNL | 484969 | 499352 | 14,383 | | |
| 12 | 2 | SNL | 54262 | 54740 | 478 | 9,335 | 36,665 |
| | | | | | | | |
| | | | | | | | |

| | |
|------------------------------------|---------|
| TOTAL PRODUCT DISPENSED (GALLONS) | 170,479 |
| TOTAL DIESEL DISPENSED (GALLONS) | 68,799 |
| TOTAL GASOLINE DISPENSED (GALLONS) | 101,680 |
| TOTAL GASOLINE DISPENSED (LITERS) | 384,859 |

VAPOR TEST

The image displays four overlapping screenshots of a software application titled "Meter Totalizers". Each window shows a table with three columns: "Meter", "Gross Qty", and "Standard Qty". The windows are arranged in a 2x2 grid, with the top-left window partially overlapping the others. The desktop background shows icons for "My Computer", "My Documents", "Network Neighborhood", "Recycle Bin", "Internet Explorer", and "hpja95serie". The taskbar at the bottom shows the Start button, several "Setup - Addes" icons, and a clock showing 6:28 AM.

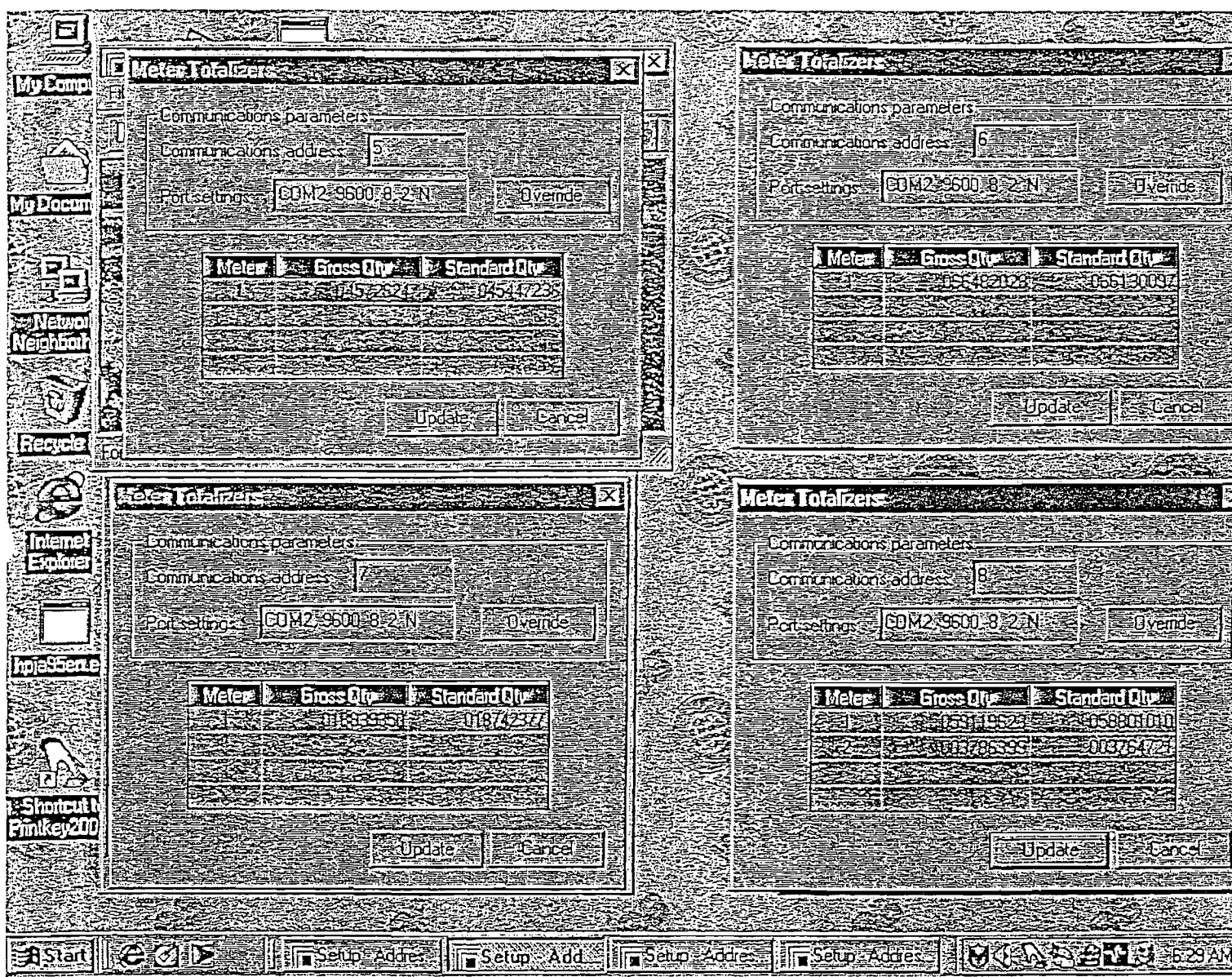
| Meter | Gross Qty | Standard Qty |
|-------|-----------|--------------|
| 1 | 05356821 | 053242652 |
| 2 | 07573285 | 076299484 |
| 3 | 107274312 | 104686544 |
| 4 | 06972259 | 069838996 |
| 2 | 004037832 | 004811770 |

START
Page 1

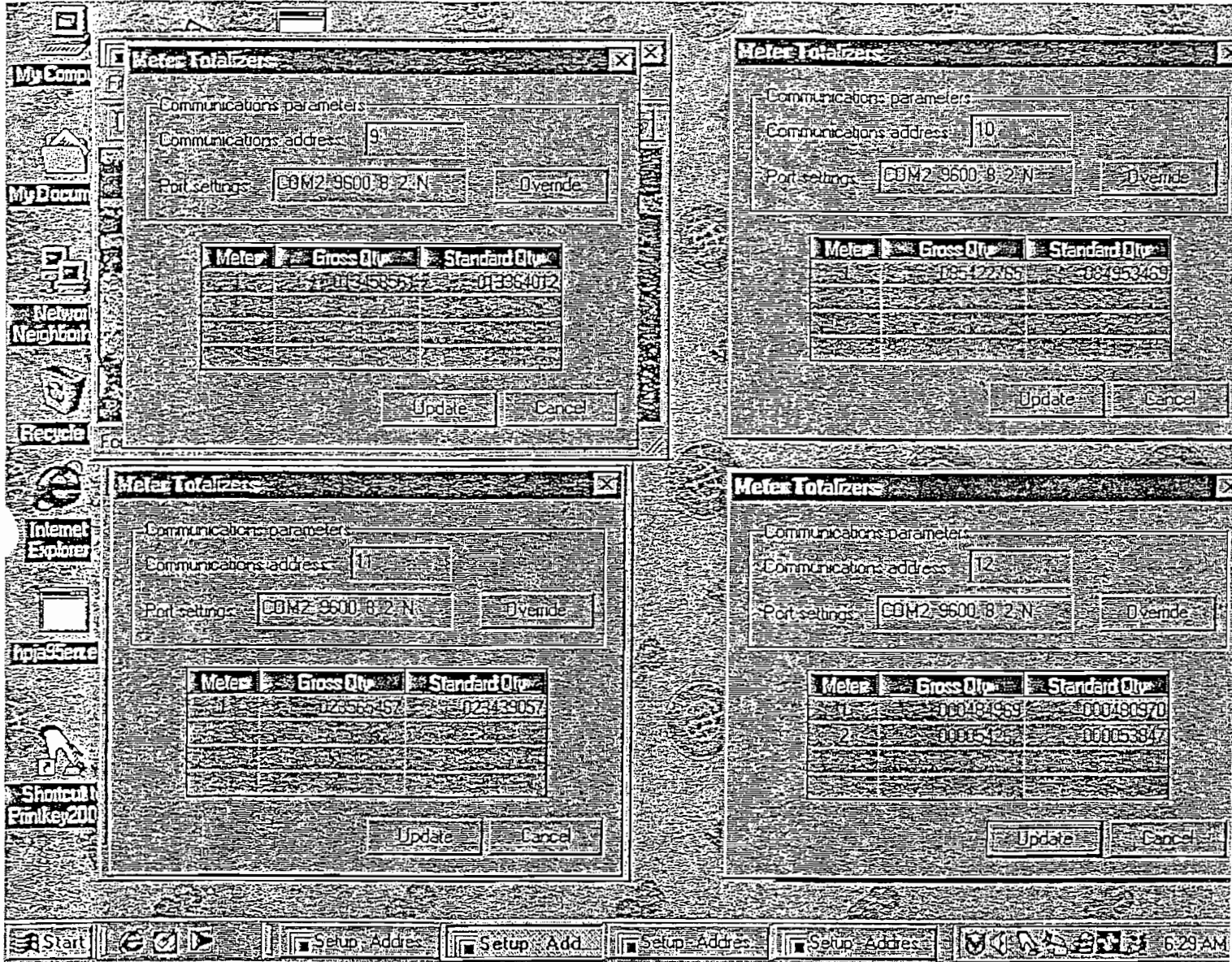
RNL

SNL

LSD

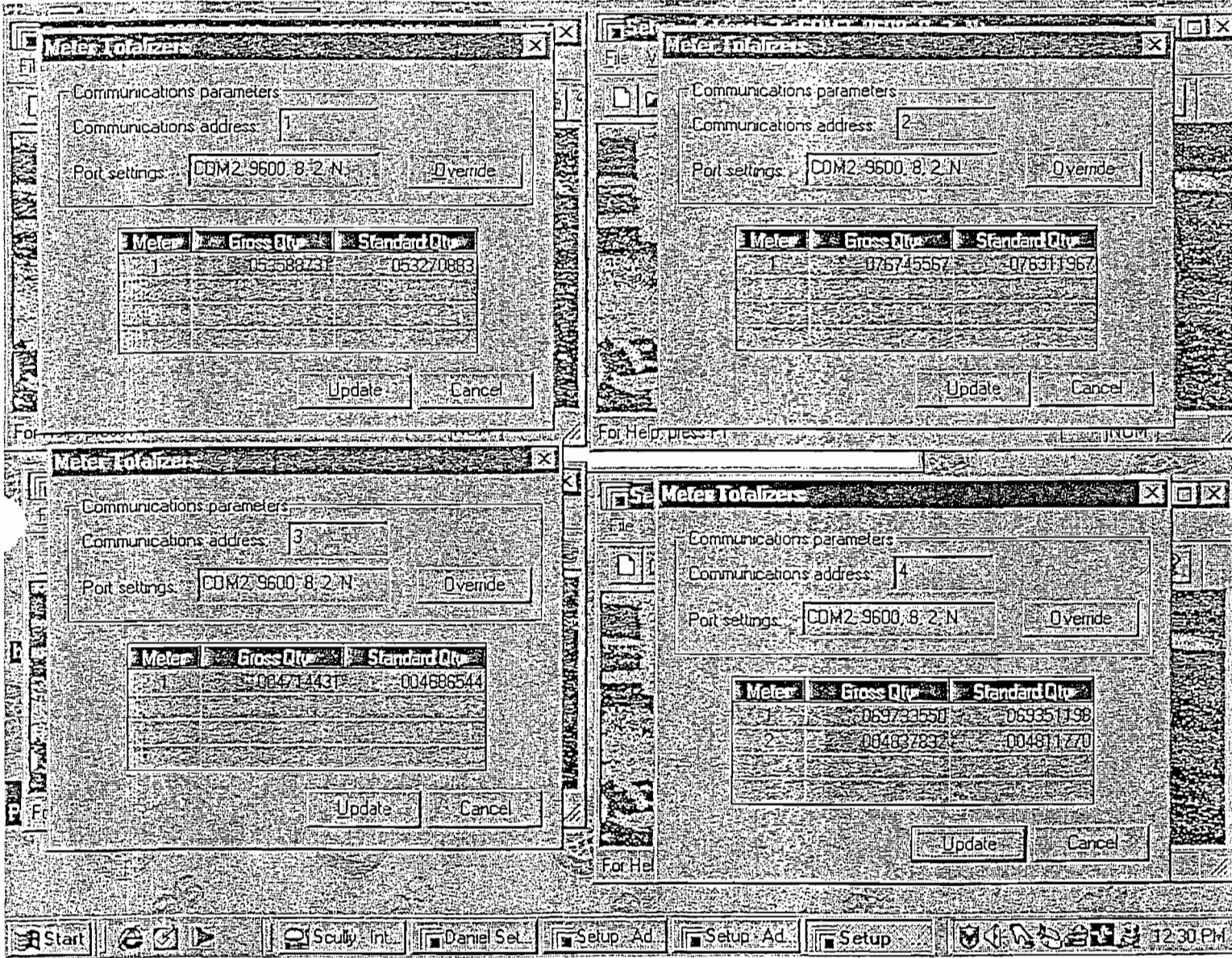


Start
Page 2



Start
Page 3

VAFOR TEST

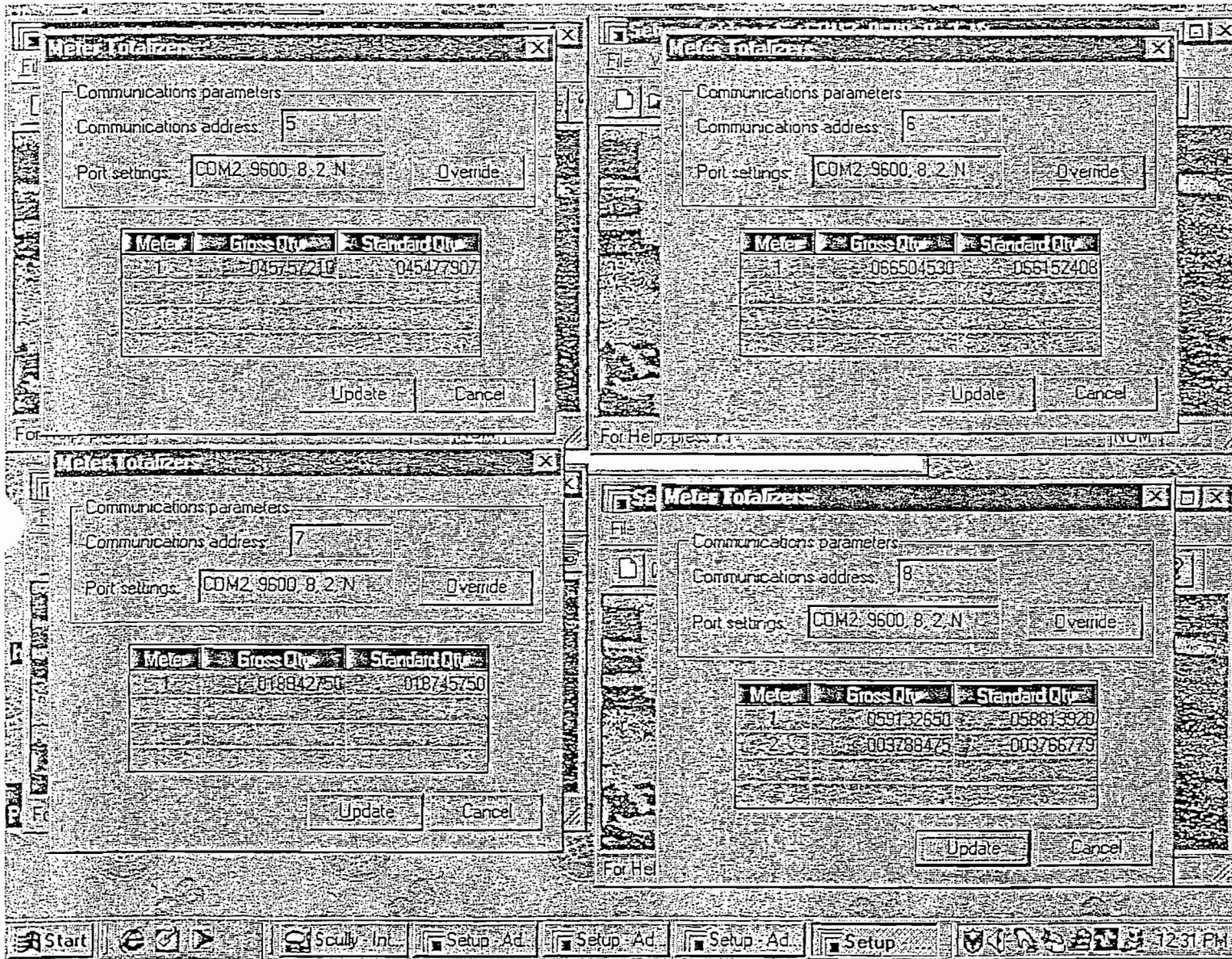


FINISH
Page 1

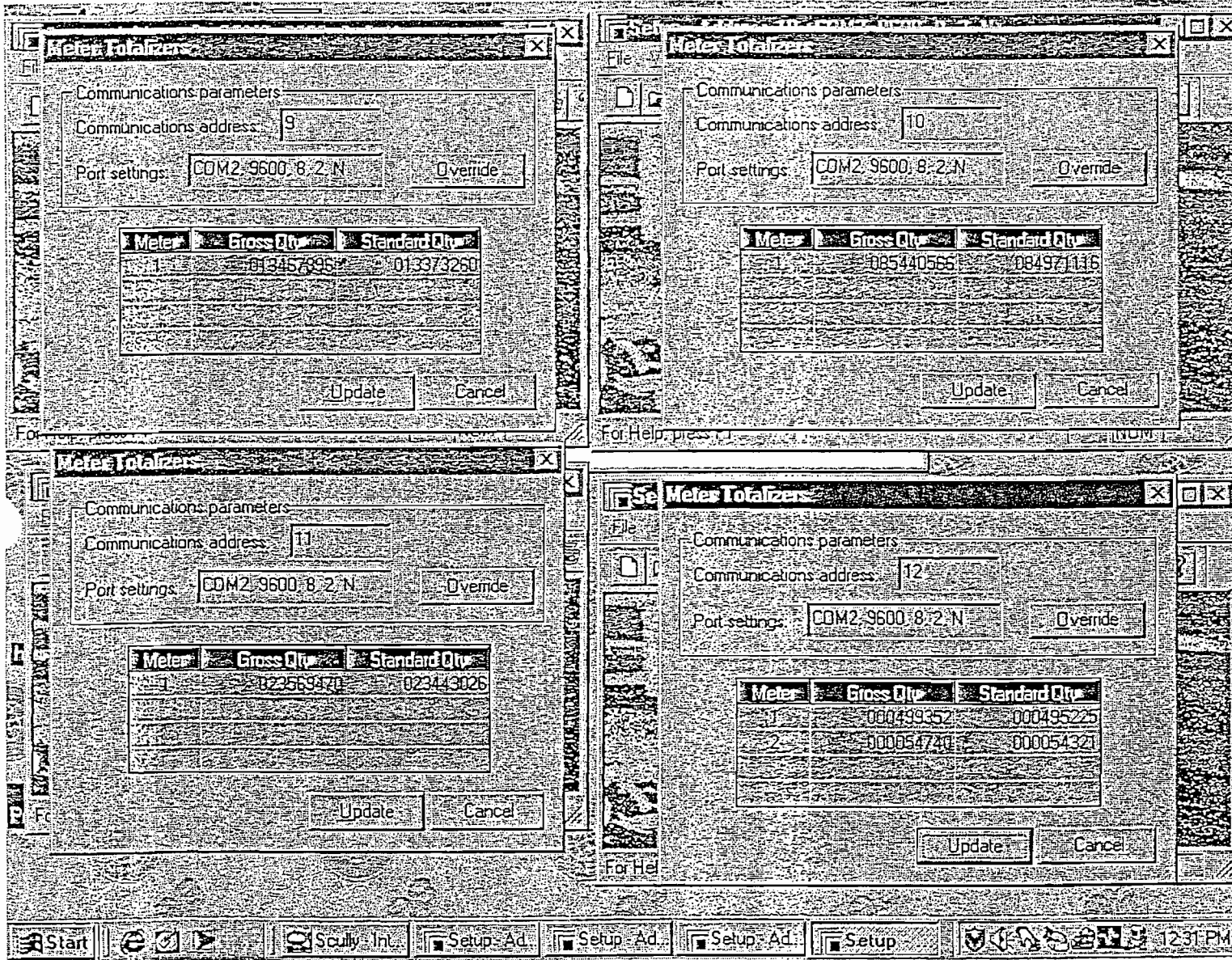
WALSLEY = 68,799 DR. DALS.

SNL = 9,957 DR. DALS.

RUCK = 91,723 DR. DALS.



Finish
Page 2



Finish
Page 3

VCU
~~VPU~~ EMISSION CALCULATIONS

COMPANY: COASTAL FUELS - PORT CANAVERAL
 FACILITY: VAPOR COMBUSTION UNIT
 DATE: 08/26/2003

| TIME (min) | METER RDG. of #1 | STATIC PRESSURE (H2O) | METER TEMP. (deg F) | BAROM. PRESSURE (Hg) | INLET VOC, (AS PROPANE) | | | OUTLET VOC, (AS PROPANE) | | | CARBON MONOXIDE | | | CARBON DIOXIDE | | | INLET | | OUTLET | | FLARE CONTROL EFF. (%) |
|---------------|---------------------------|-----------------------------|---------------------------|----------------------------|----------------------------------|-------------------------|--------------|----------------------------------|---------------------------|----------------|----------------------------------|---------------------------|----------------|----------------------------------|-------------------------|--------------|------------------------|--------------|------------------------|--------------|---------------------------------|
| | | | | | ANALYZER READING (% CHART) | INSTRU. SCALE (%) | CONC. (%) | ANALYZER READING (% CHART) | INSTRU. SCALE (PPM) | CONC. (PPM) | ANALYZER READING (% CHART) | INSTRU. SCALE (PPM) | CONC. (PPM) | ANALYZER READING (% CHART) | INSTRU. SCALE (%) | CONC. (%) | GAS VOLUME (M3)* | MASS (mg) | GAS VOLUME (M3)* | MASS (mg) | |
| 255 | 18700 | 1 | 94 | 30.07 | 43 | 100 | 43 | 2 | 1,000 | 20 | 5 | 1,000 | 50 | 6 | 20 | 1.2 | 13.60 | 10,716,347 | 1485.10 | 54,444 | 99.49 |
| 260 | 19500 | 1 | 94 | 30.07 | 32 | 100 | 32 | 5 | 1,000 | 50 | 20 | 1,000 | 200 | 3 | 20 | 0.6 | 21.75 | 12,759,929 | 3451.85 | 316,362 | 97.52 |
| 265 | 20700 | 1.5 | 94 | 30.07 | 37.5 | 100 | 37.5 | 2 | 1,000 | 20 | 16 | 1,000 | 160 | 2 | 20 | 0.4 | 32.67 | 22,456,919 | 9376.11 | 343,728 | 98.47 |
| 270 | 21800 | 1 | 95 | 30.07 | 40 | 100 | 40 | 2.5 | 1,000 | 25 | 15 | 1,000 | 150 | 7 | 20 | 1.4 | 29.86 | 21,891,613 | 2573.01 | 117,908 | 99.46 |
| 275 | 21800 | 0.5 | 100 | 30.07 | 31 | 100 | 31 | 2.5 | 1,000 | 25 | 9 | 1,000 | 90 | 5 | 20 | 1 | | | | | |
| 280 | 22100 | 0.7 | 101 | 30.07 | 15 | 100 | 15 | 2 | 1,000 | 20 | 4 | 1,000 | 40 | 5 | 20 | 1 | 8.05 | 2,213,348 | 369.64 | 13,551 | 99.39 |
| 285 | 22500 | 0.4 | 103 | 30.07 | 10 | 100 | 10 | 1 | 1,000 | 10 | 3 | 1,000 | 30 | 7 | 20 | 1.4 | 10.69 | 1,958,996 | 233.01 | 4,271 | 99.78 |
| 290 | 22700 | 0.4 | 105 | 30.07 | 7.5 | 100 | 7.5 | 3 | 1,000 | 30 | 0.5 | 1,000 | 5 | 3 | 20 | 0.6 | 5.32 | 732,023 | 206.74 | 11,369 | 98.45 |
| 295 | 23100 | 0.6 | 107 | 30.07 | 8 | 100 | 8 | 3 | 1,000 | 30 | 0 | 1,000 | 0 | 6 | 20 | 1.2 | 10.62 | 1,556,901 | 216.13 | 11,885 | 99.24 |
| 300 | 23100 | 0 | 112 | 30.07 | 9 | 100 | 9 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | 4 | 20 | 0.8 | | | | | |
| 305 | 23100 | 0 | 112 | 30.07 | 9 | 100 | 9 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | 3 | 20 | 0.6 | | | | | |
| 310 | 23100 | 0.5 | 116 | 30.07 | 8.5 | 100 | 8.5 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | 2 | 20 | 0.4 | | | | | |
| 315 | 23100 | 0 | 117 | 30.07 | 8 | 100 | 8 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | 2 | 20 | 0.4 | | | | | |
| 320 | 23100 | 0 | 117 | 30.07 | 7.5 | 100 | 7.5 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | | 20 | 0 | | | | | |
| 325 | 23100 | 0 | 118 | 30.07 | 7.5 | 100 | 7.5 | 0 | 1,000 | 0 | 0 | 1,000 | 0 | 2 | 20 | 0.4 | | | | | |
| 330 | 23300 | 0.5 | 109 | 30.07 | 8 | 100 | 8 | 6 | 1,000 | 60 | 0.5 | 1,000 | 5 | 1 | 20 | 0.2 | 5.29 | 775,525 | 673.35 | 74,055 | 90.45 |
| 335 | 23400 | 0.5 | 108 | 30.07 | 10 | 100 | 10 | 4 | 1,000 | 40 | 2 | 1,000 | 20 | 5 | 20 | 1 | 2.65 | 485,556 | 80.76 | 5,921 | 98.78 |
| 340 | 24300 | 1 | 105 | 30.07 | 19 | 100 | 19 | 3 | 1,000 | 30 | 5 | 1,000 | 50 | 7 | 20 | 1.4 | 24.00 | 8,357,295 | 988.30 | 54,347 | 99.35 |
| 345 | 24700 | 1 | 105 | 30.07 | 20 | 100 | 20 | 4 | 1,000 | 40 | 10 | 1,000 | 100 | 5 | 20 | 1 | 10.67 | 3,909,846 | 645.07 | 47,297 | 98.79 |
| 350 | 24900 | 0.5 | 107 | 30.07 | 13 | 100 | 13 | 3 | 1,000 | 30 | 4 | 1,000 | 40 | 2 | 20 | 0.4 | 5.31 | 1,264,673 | 540.43 | 29,718 | 97.65 |
| 355 | 25600 | 0.5 | 107 | 30.07 | 20 | 100 | 20 | 2 | 1,000 | 20 | 4 | 1,000 | 40 | 3 | 20 | 0.6 | 18.58 | 6,809,779 | 1921.60 | 70,446 | 98.97 |
| 360 | 25600 | 0.5 | 107 | 30.07 | 25 | 100 | 25 | 2 | 1,000 | 20 | 4 | 1,000 | 40 | 4 | 20 | 0.8 | | | | | |
| TOTAL | 25600 | | | | | | | | | | | | | | | | 705.166 | 364,003,677 | 76,040 | 3,469,155 | |
| AVERAGE | | | 0.7 | 90 | 30.06 | 25.6 | 26 | 2.2 | 22 | 6 | 63 | 4 | 0.8 | | | | | | | | 98.48 |

* At standard conditions of 68 deg F and 29.92in. Hg)

EQUATIONS

VOLUME

$$V_{\text{std}} = (V_f - V_i) \times Y_m \times [P_{\text{bar}} + (P_g/13.6)] / P_{\text{std}} \times [T_{\text{std}}/T_m]$$

where:

V_{std} = Meter volume at standard conditions,
ft.³ at 528°Rankin and 29.92 in. Hg

Y_m = Meter correction factor

V_f = Final meter reading (ft.³)

V_i = Initial meter reading (ft.³)

P_{bar} = Barometric pressure (in. Hg)

P_g = Static pressure in duct (in. H₂O)

P_{std} = Standard pressure, 29.92 in. Hg

T_{std} = Absolute standard temperature, 528°Rankin

T_m = Absolute meter temperature (°Rankin)

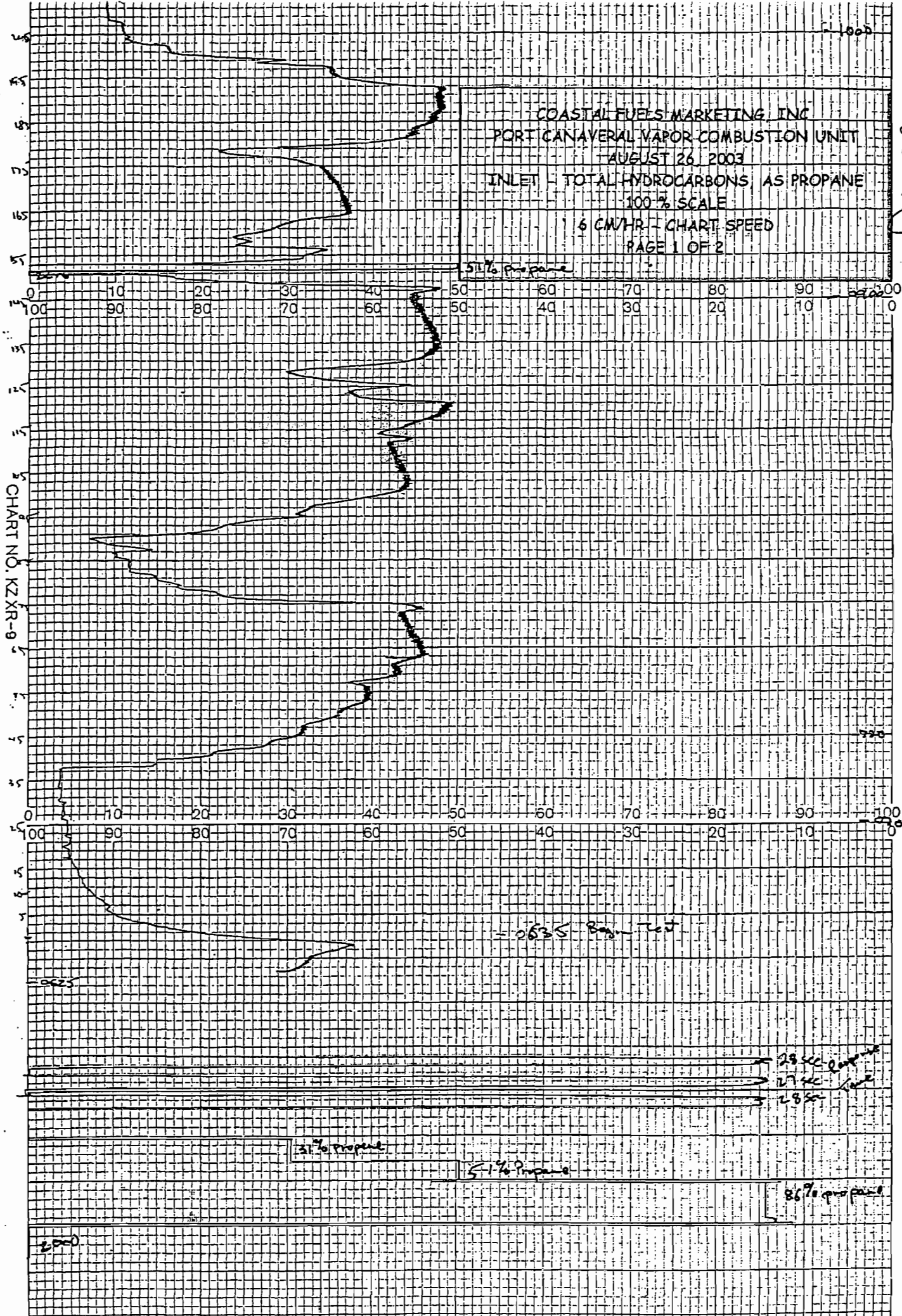
ORIFICE VELOCITY (5 MINUTE INTERVAL)

$$V_o = V_{\text{std}} / (A_o \times 5 \text{ min} \times 60 \text{ sec/min})$$

where:

V_o = Velocity at flare burner orifice (ft./sec.)

A_o = Total area of orifice openings (ft.²)



COASTAL FUELS MARKETING, INC
 PORT CANAVERAL VAPOR COMBUSTION UNIT
 AUGUST 26, 2003
 INLET - TOTAL HYDROCARBONS, AS PROPANE
 100% SCALE
 6 CM/HR - CHART SPEED
 PAGE 1 OF 2

CHART NO. KZXR-8

51% propane

2635 Reg. Test

29 KC
 27 KC
 28 KC

21% propane

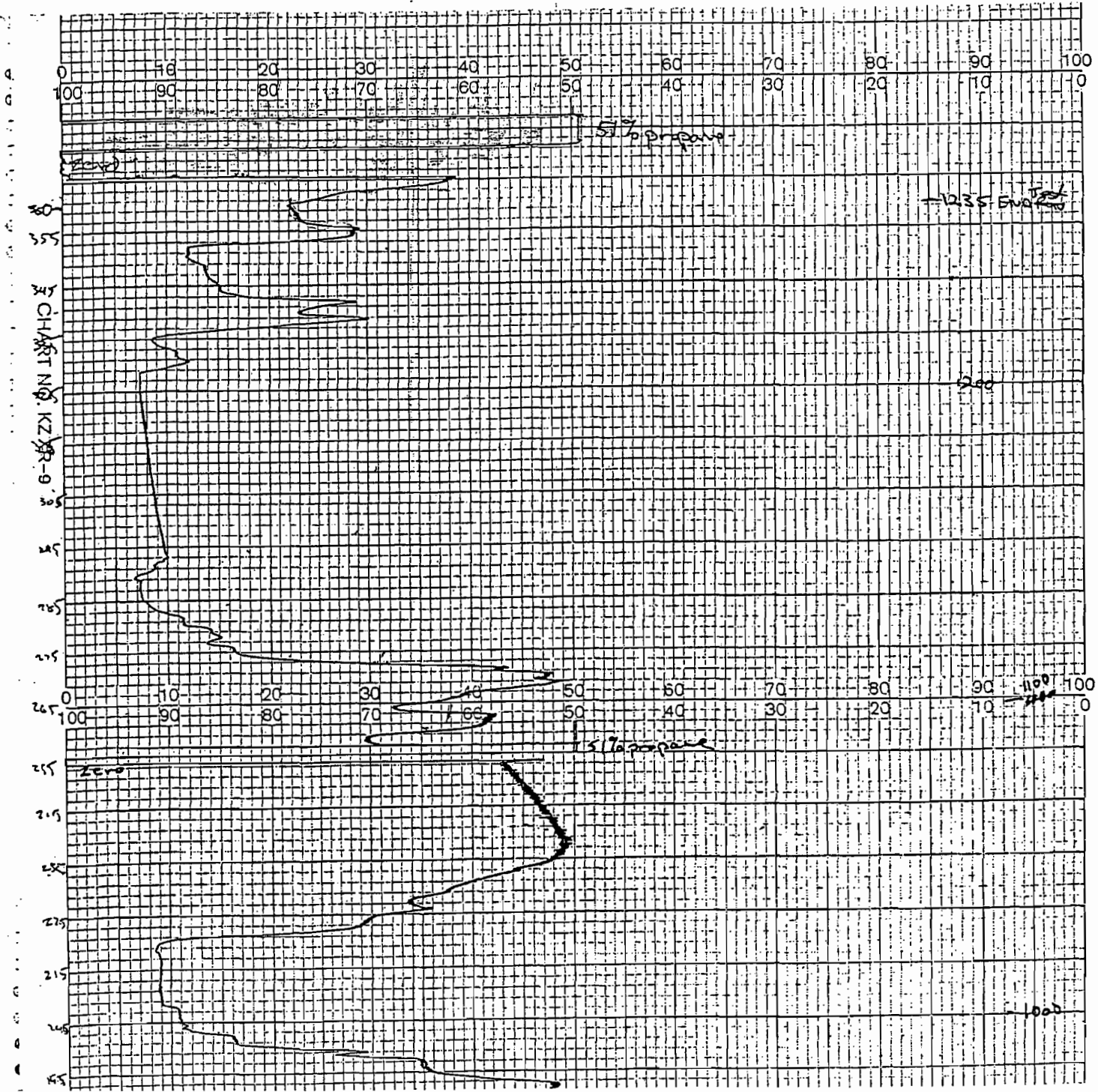
51% propane

86% propane

2000

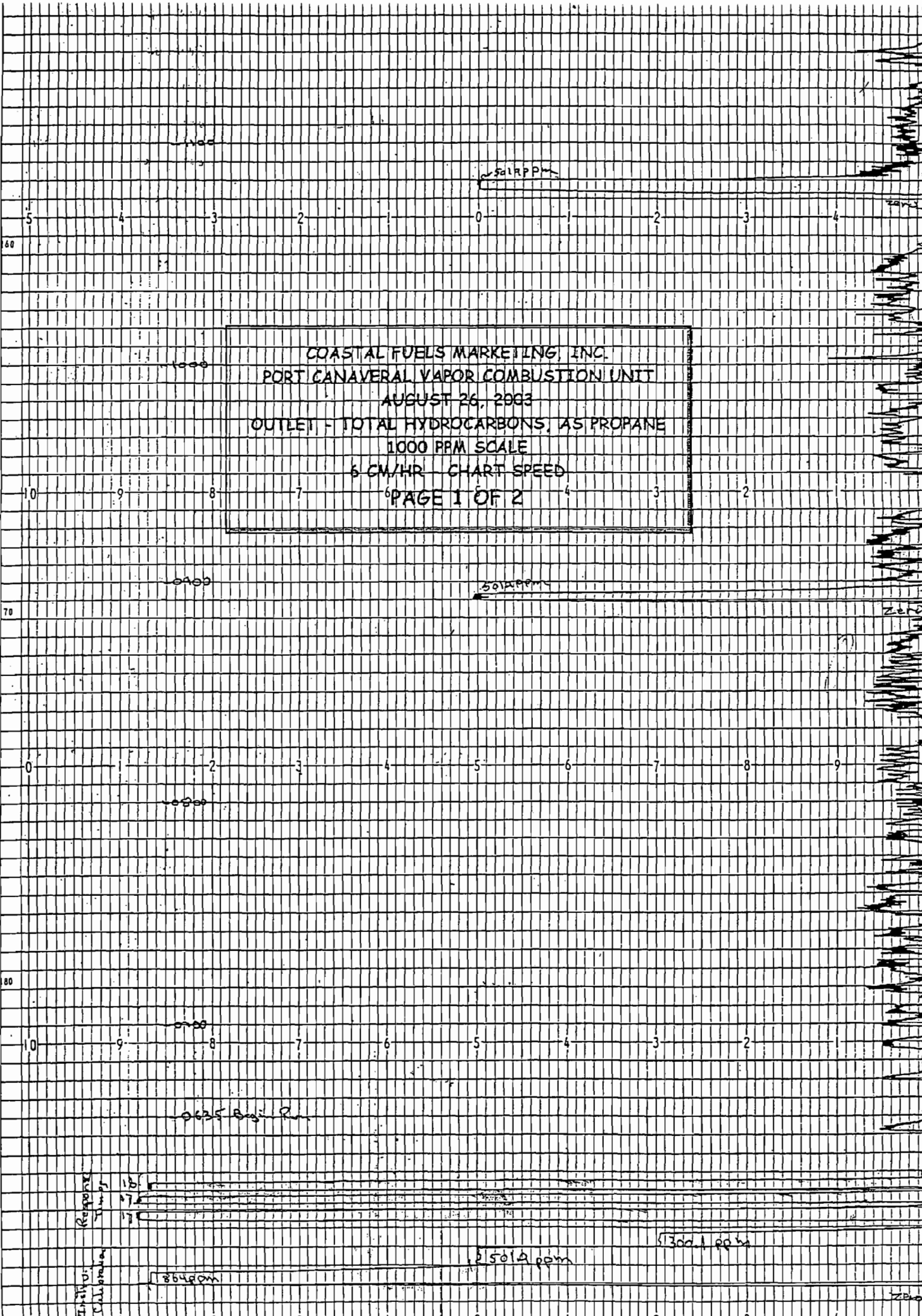
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COASTAL FUELS MARKETING, INC.
 PORT CANAVERAL VAPOR COMBUSTION UNIT
 AUGUST 26, 2003
 INLET - TOTAL HYDROCARBONS, AS PROPANE
 100 % SCALE
 6 CM/HR - CHART SPEED
 PAGE 2 OF 2

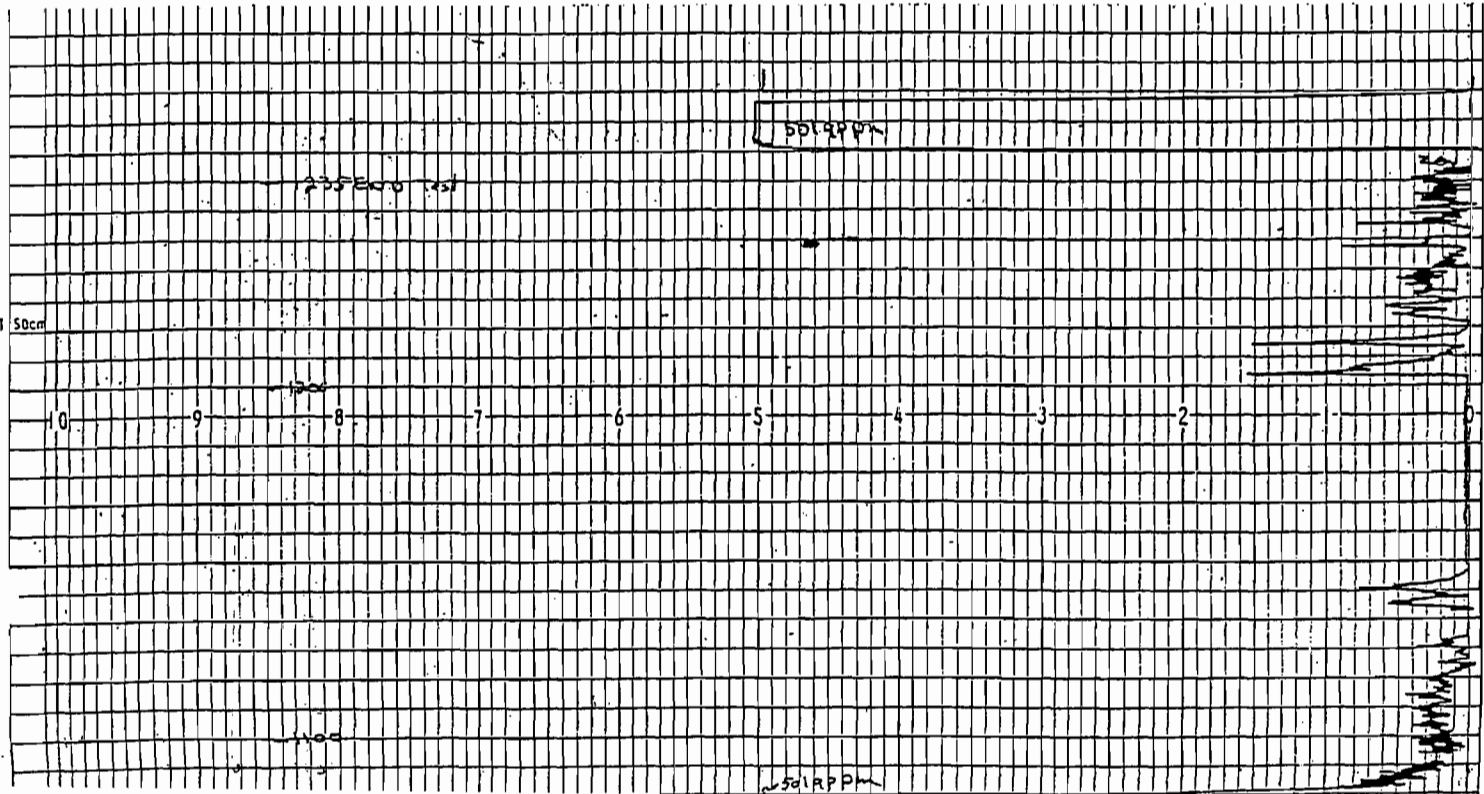


KOKUSAI CHART

COASTAL FUELS MARKETING, INC.
 PORT CANAVERAL VAPOR COMBUSTION UNIT
 AUGUST 26, 2003
 OUTLET - TOTAL HYDROCARBONS, AS PROPANE
 1000 PPM SCALE
 5 CM/HR CHART SPEED
 PAGE 1 OF 2



COASTAL FUELS MARKETING, INC.
PORT CANAVERAL VAPOR COMBUSTION UNIT
AUGUST 26, 2003
OUTLET - TOTAL HYDROCARBONS, AS PROPANE
1000 PPM SCALE
6 CM/HR - CHART SPEED
PAGE 2 OF 2



110

W 1100

KOHJIAN CHART

0 1 2 3 4 5 6 7 8 9 10

COASTAL FUELS MARKETING, INC.
 PORT CANAVERAL VAPOR COMBUSTION UNIT
 AUGUST 26, 2003
 OUTLET - CARBON DIOXIDE
 20% SCALE
 6 CM/HR - CHART SPEED
 PAGE 1 OF 2

120

10 9 8 7 6 5 4 3 2 1 0

W 0400

187% CO₂

130

5 4 3 2 1 0 1 2 3 4 5

10 9 8 7 6 5 4 3 2 1 0

gas 3.0m Tpd

5% CO₂

140

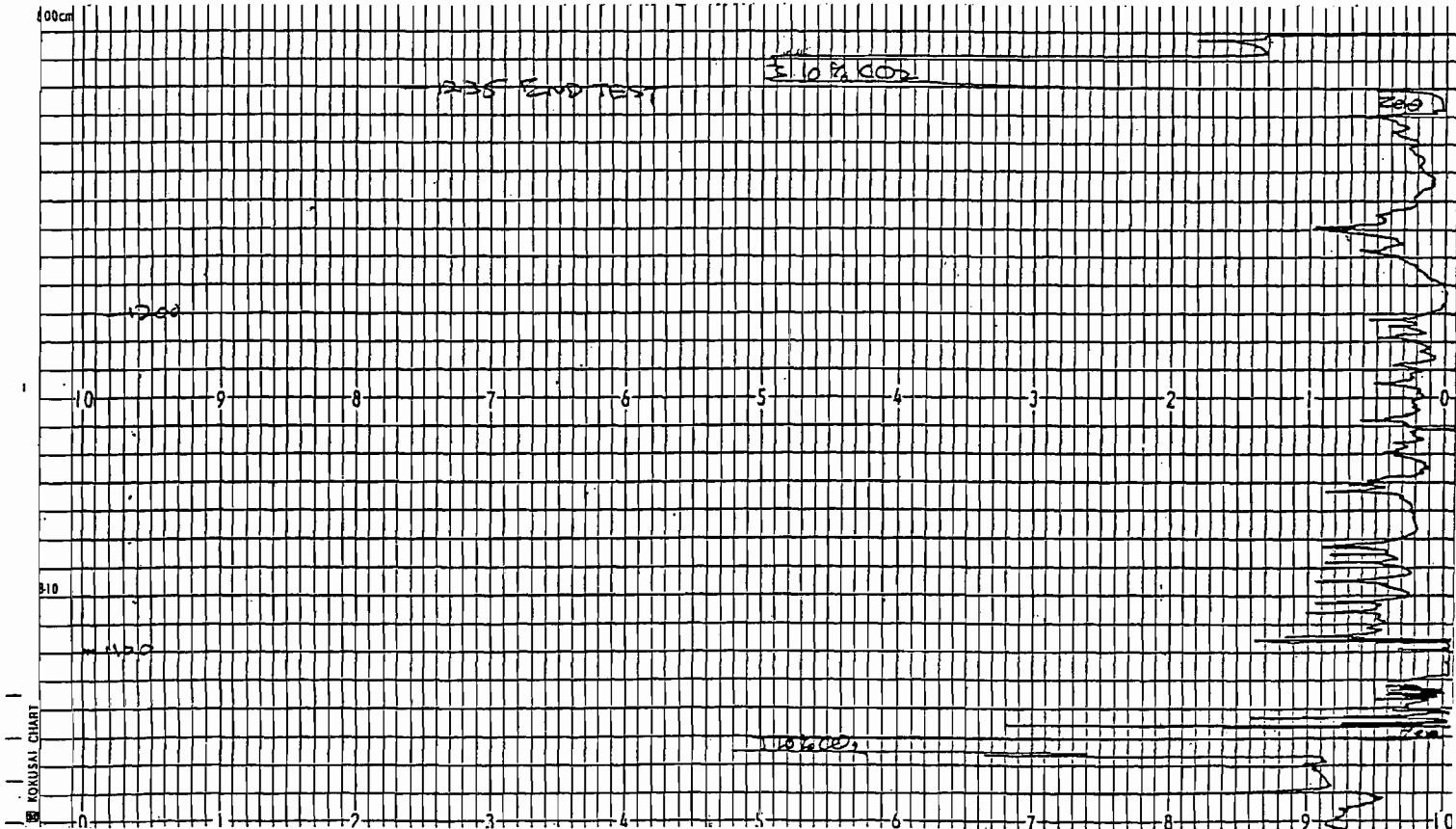
18.5% CO₂

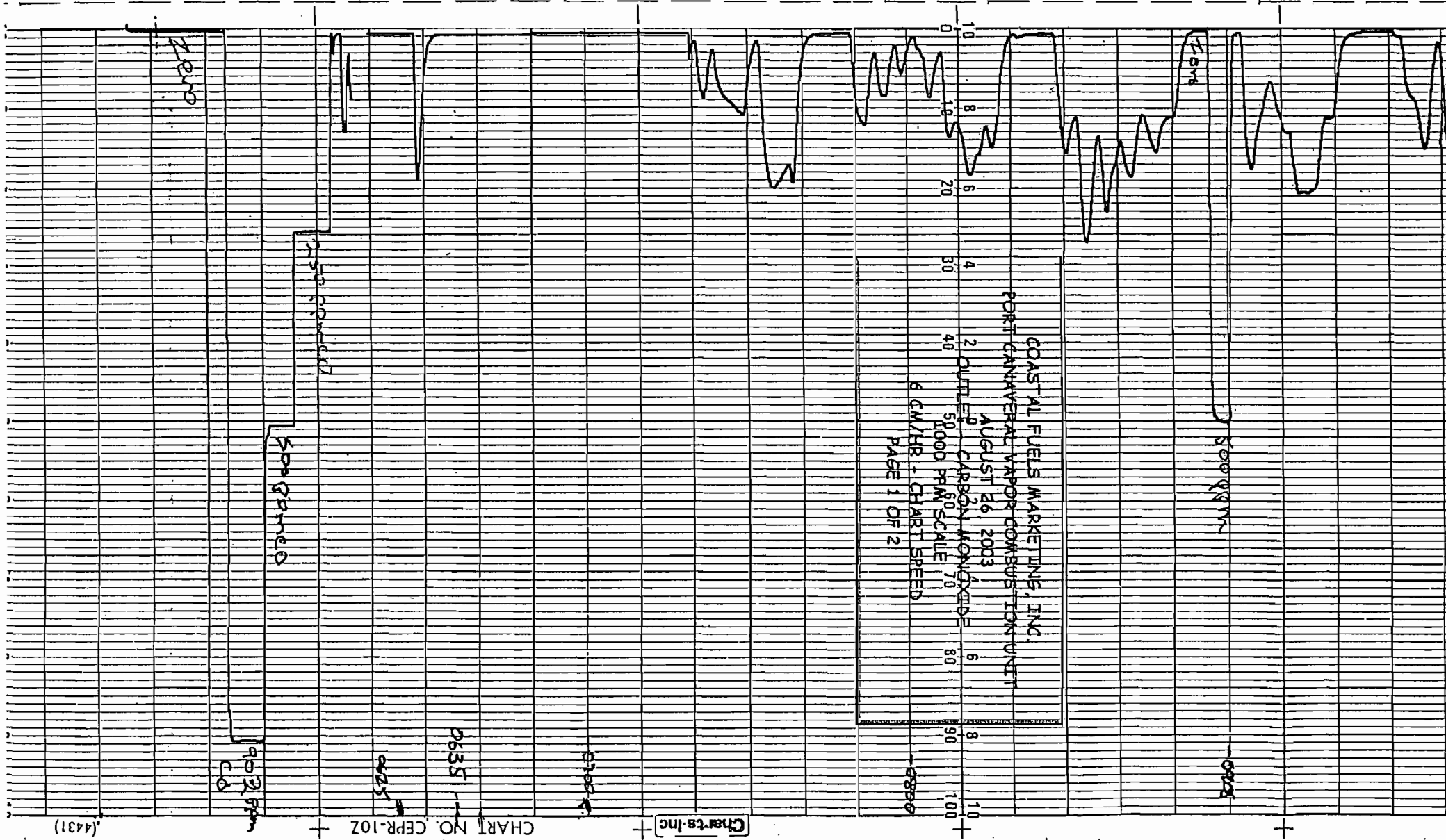
109% CO₂

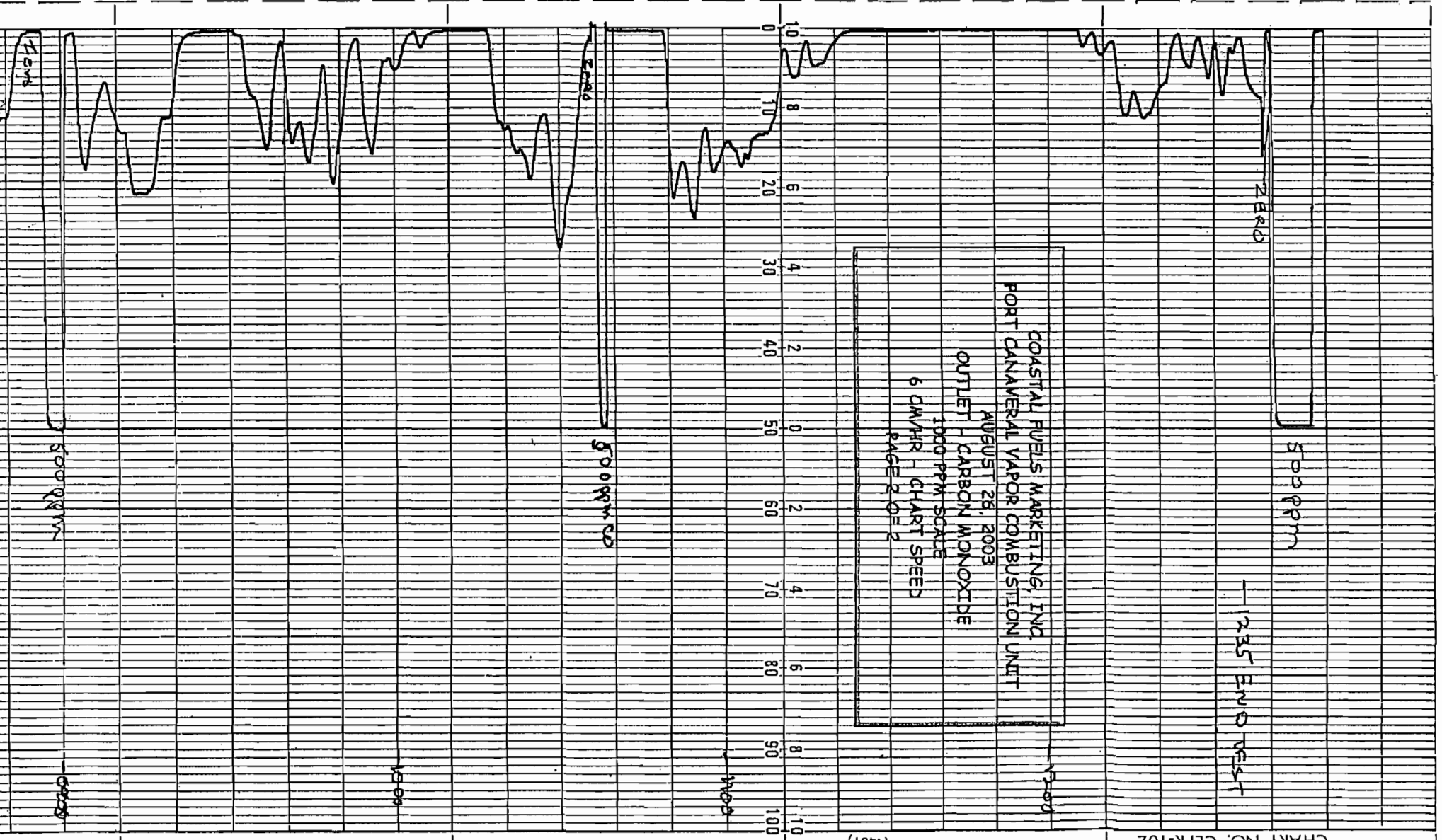
KOHJIAN CHART

0 1 2 3 4 5 6 7 8 9 10

COASTAL FUELS MARKETING, INC.
PORT CANAVERAL VAPOR COMBUSTION UNIT
AUGUST 26, 2003
OUTLET - CARBON DIOXIDE
20% SCALE
6 CM/HR - CHART SPEED
PAGE 2 OF 2







COASTAL FUELS MARKETING, INC.
 FORT CANAVERAL VAPOR COMBUSTION UNIT
 AUGUST 28, 2003
 OUTLET - CARBON MONOXIDE
 1000 PPM SCALE
 6 CM/HR - CHART SPEED
 PAGE 2 OF 2

1235 END TEST

500 ppm

ZERO

100 80 70 60 50 40 30 20 10 0

500 ppm

ZERO

500 ppm

ZERO

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

GAS DILUTION SYSTEM FIELD EVALUATION

| | |
|------------------------|--------------------------------------|
| COMPANY | COASTAL FUELS MARKETING, INC. |
| SOURCE | PORT CANAVERAL VAPOR COMBUSTION UNIT |
| DATE | 08/26/2003 |
| DILUTION INSTRUMENT | ENVIRONICS MODEL 2020 |
| SERIAL # | 1899 |
| MEASUREMENT INSTRUMENT | CALIFORNIA ANALYTICAL |
| SERIAL # | |
| SUPPLY GAS | 8606 PPM |

| SUPPLY GAS (PPM) | MFM # | PREDICTED | INJECTION | | | AVERAGE (PPM) | ACCEPTABLE RANGE | | | % DIFFERENCE |
|------------------------|-------|--------------------|-------------|-------------|-------------|------------------|---------------------|----|--------|-----------------|
| | | GAS CONC. (PPM) | #1 (PPM) | #2 (PPM) | #3 (PPM) | | | to | | |
| 8606 | 2 | 8100 | 8100 | 8050 | 8060 | 8070.0 | 8231.4 | to | 7908.6 | -0.4% |
| 8606 | 2 | 2500 | 2520 | 2520 | 2520 | 2520.0 | 2570.4 | to | 2469.6 | 0.8% |
| | | | | | | | | to | | |
| | | | | | | | | to | | |
| MID RANGE | | 5143 | 5100 | 5050 | 5100 | 5083.3 | 5185.0 | to | 4981.7 | -1.2% |

EPA METHOD 205 - VERIFICATION OF GAS DILUTION SYSTEMS FOR FIELD INSTRUMENT CALIBRATIONS
40 CFR 51, APPENDIX M

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

1204 North Wheeler Street St. Plant City, Florida 33566 (813) 752-5014

METHOD 25A CALIBRATION

| TEST DATA | |
|-----------|--------------------------------------|
| DATE | 04/26/2003 |
| COMPANY | COASTAL FUEL MARKETING, INC. |
| SOURCE | PORT CANAVERAL VAPOR COMBUSTION UNIT |

| INSTRUMENT DATA | | |
|-----------------|--------------|----------|
| | MONITOR | RECORDER |
| MANUFACTURER | CALIF. ANAL. | YOKAGAWA |
| MODEL NO. | HID300(M) | 302111 |
| SERIAL NO. | | |
| RANGE (%) | 100 | 6 CM/HR |

| CALIBRATION GASES | | | |
|-------------------|--------------|--|--|
| SUPPLIER | AIR PRODUCTS | | |
| CYLINDER # | PROPANE | | |
| CONCENTRATION | 99.95 | | |
| EXPIRATION DATE | | | |

| CALIBRATION ERROR TEST (within 2 hrs. of test) | | | | | | | |
|--|------------|---------|------------|---------|---------|------------|--------------|
| Selected Range: | 100 | % | | | | | |
| Adjusted zero gas response: | 0 | % | | | | | |
| Adjusted span gas response: | 86 | % | | | | | |
| Linear Regression Analysis: | Slope: | 1 | Intercept: | 0 | | | |
| Mid-level gas response: | Predicted: | 51 | % | Actual: | 50.3 | % | % diff. -1.4 |
| Low-level gas response: | Predicted: | 31 | % | Actual: | 30.5 | % | % diff. -1.6 |
| RESPONSE TIME TEST | | | | | | | |
| 1) | 28 | SECONDS | 2) | 27 | SECONDS | 3) | 28 seconds |
| TEST PERIOD | | | | | | | |
| Start Time: | 0635 | | | | | Stop Time: | 1235 |

| DRIFT DETERMINATION | | | | | |
|---------------------|----------------|---------------|--------------|------------|---------------|
| Time | Zero | | Response (%) | Span | |
| | Response (ppm) | % diff.(span) | | Actual (%) | % diff.(span) |
| 0910 | 0 | 0 | 50 | 51 | -2.0 |
| 1050 | 0 | 0 | 50.3 | 51 | -1.4 |
| 1240 | 0 | 0 | 50.7 | 51 | -0.6 |
| | | | | | |
| | | | | | |
| | | | | | |

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

1204 North Wheeler Street St. Plant City, Florida 33566 (813) 752-5014

METHOD 25A CALIBRATION

| TEST DATA | |
|-----------|--------------------------------------|
| DATE | 08/26/2003 |
| COMPANY | COASTAL FUELS MARKETING, INC. |
| SOURCE | PORT CANAVERAL VAPOR COMBUSTION UNIT |

| INSTRUMENT DATA | | |
|-----------------|-------------|----------|
| | MONITOR | RECORDER |
| MANUFACTURER | CALIF. ANAL | YOKOGAWA |
| MODEL NO | HID300(M) | BD211 |
| INSTR. NO. | | |
| RANGE (PPM) | 1,000 | 6 CM/HR |

| CALIBRATION GASES | | | |
|-------------------|------------|------------|------------|
| SUPPLIER | AIRGAS | AIRGAS | AIRGAS |
| CYLINDER # | SG91655331 | SG9102825 | SG896044 |
| CONCENTRATION | 864 | 501.9 | 300.1 |
| EXPIRATION DATE | 04/05/2006 | 07/07/2005 | 04/02/2006 |

| CALIBRATION ERROR TEST (within 2 hrs. of test) | | | | | | | |
|--|------------|------------|------------|---------|------------|-----|--------------|
| Selected Range | 1000 | ppm | | | | | |
| Adjusted zero gas response | 0 | ppm | | | | | |
| Adjusted span gas response | 864 | ppm | | | | | |
| Linear Regression Analysis | Slope: | 1 | Intercept: | 0 | | | |
| Mid-level gas response | Predicted: | 501.9 | ppm | Actual: | 498 | ppm | % diff. -0.8 |
| Low-level gas response | Predicted: | 300.1 | ppm | Actual: | 295 | ppm | % diff. -1.7 |
| RESPONSE TIME TEST | | | | | | | |
| 1) | 17 SECONDS | 2) | 17 SECOND | 3) | 17 seconds | | |
| TEST PERIOD | | | | | | | |
| Start Time: | 0635 | Stop Time: | 1235 | | | | |

| DRIFT DETERMINATION | | | | | |
|---------------------|----------------|----------------|----------------|--------------|---------|
| Time | Zero | | Response (ppm) | Span | |
| | Response (ppm) | % diff. (span) | | Actual (ppm) | % diff. |
| 0855 | 0 | 0 | 500 | 501.9 | -0.4 |
| 1048 | 0 | 0 | 500 | 501.9 | -0.4 |
| 1240 | 0 | 0 | 502 | 501.9 | 0.0 |
| | | | | | |
| | | | | | |
| | | | | | |

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

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INSTRUMENT CALIBRATION

| TEST DATA | |
|------------|--------------------------------------|
| DATE | 08/26/2003 |
| COMPANY | COASTAL FUELS MARKETING |
| SOURCE | PORT CANAVERAL VAPOR COMBUSTION UNIT |
| PARAMETER | CARBON DIOXIDE |
| TECHNICIAN | K. ROBERTS |

| INSTRUMENT DATA | | |
|-----------------|-------------|------------|
| | MONITOR | RECORDER |
| MANUFACTURER | CALIF. ANAL | YOKAGAWA |
| MODEL NO. | 110 | SINGLE PEN |
| SERIAL NO. | | |
| RANGE (%) | 20 | 6 CM/HR |

| CALIBRATION GASES | | | |
|-------------------|---------------|--|--|
| SUPPLIER | Spectra Gases | | |
| CYLINDER # | CC83934 | | |
| CONC. (%) | 19.9 | | |
| EXPIRATION DATE | 03/23/2004 | | |

| POINT | OBSERVED CONC. | ACTUAL CONC. | PERCENT DIFF. |
|-------|----------------|--------------|---------------|
| 1 | 0 | 0 | 0.00 |
| 2 | 5 | 5 | 0.00 |
| 3 | 9.9 | 10 | -0.50 |
| 4 | 18.5 | 18.5 | 0.00 |

Regression Output:

| | | |
|---------------------|--------|---------|
| Constant | | -0.0177 |
| Std Err of Y Est | | 0.0607 |
| R Squared | | 1.0000 |
| No. of Observations | | 4 |
| Degrees of Freedom | | 2 |
| X Coefficient(s) | 0.9991 | |
| Std Err of Coef. | 0.0044 | |

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INSTRUMENT CALIBRATION

| TEST DATA | |
|------------|--------------------------------------|
| DATE | 08/26/2003 |
| COMPANY | COASTAL FUELS MARKETING |
| SOURCE | PORT CANAVERAL VAPOR COMBUSTION UNIT |
| PARAMETER | CARBON MONOXIDE |
| TECHNICIAN | K. ROBERTS |

| INSTRUMENT DATA | | |
|-----------------|--------------|----------|
| | MONITOR | RECORDER |
| MANUFACTURER | TECO | METRONIC |
| MODEL NO. | 48 | |
| SERIAL NO. | 48-27158-228 | |
| RANGE (PPM) | 1000 | 6CM/HR |

| CALIBRATION GASES | | | |
|-------------------|---------------|--|--|
| SUPPLIER | SPECTRA GASES | | |
| CYLINDER # | CC-126519 | | |
| CONC. (%) | 902 | | |
| EXPIRATION DATE | 07/03/2006 | | |

| POINT | OBSERVED CONC. | ACTUAL CONC. | PERCENT DIFF. |
|-------|----------------|--------------|---------------|
| 1 | 0 | 0 | 0.00 |
| 2 | 255 | 250 | 0.50 |
| 3 | 505 | 500 | 0.50 |
| 4 | 908 | 902 | 0.60 |

Regression Output:

| | | |
|---------------------|--------|--------|
| Constant | | 1.6234 |
| Std Err of Y Est | | 1.9109 |
| R Squared | | 1.0000 |
| No. of Observations | | 4 |
| Degrees of Freedom | | 2 |
| X Coefficient(s) | 1.0058 | |
| Std Err of Coef. | 0.0029 | |

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

PRESSURE MEASUREMENT DEVICE CALIBRATION FORM

| | | | |
|--------------|------------|-------------------|------------|
| Device Type | Magnehelic | Calibration Date | 04/01/2003 |
| Range | 0 - 5" H2O | Calibrated by | K. Roberts |
| Manufacturer | Dwyer | Reference Device | Manometer |
| Serial No. | R890411RR3 | Measurement Units | " H2O |

| Device Reading | Reference Device Reading | % Difference* |
|----------------|--------------------------|---------------|
| 0.0 | 0.0 | 0.00 |
| 1 | 1 | 0.00 |
| 2.5 | 2.5 | 0.00 |
| 4.1 | 4 | 2.50 |
| 5.1 | 5 | 2.00 |

* % difference shall not exceed +/- 5%

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

PRESSURE MEASUREMENT DEVICE CALIBRATION FORM

| | | | |
|--------------|-------------|-------------------|------------|
| Device Type | Magnehelic | Calibration Date | 04/01/2003 |
| Range | 0 - 20" H2O | Calibrated by | K. Roberts |
| Manufacturer | Dwyer | Reference Device | Manometer |
| Serial No. | R9602025L4 | Measurement Units | " H2O |

| Device Reading | Reference Device Reading | % Difference* |
|----------------|--------------------------|---------------|
| 0 | 0 | 0.00 |
| 5.1 | 5 | 2.00 |
| 10 | 10 | 0.00 |
| 15.3 | 15 | 2.00 |
| 19.9 | 20 | -0.50 |

* % difference shall not exceed +/- 5%

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

PRESSURE MEASUREMENT DEVICE CALIBRATION FORM

| | | | |
|--------------|------------------|-------------------|------------|
| Device Type | Magnehelic | Calibration Date | 04/01/2003 |
| Range | 0 - 20" H2O (M2) | Calibrated by | K. Roberts |
| Manufacturer | Dwyer | Reference Device | Manometer |
| Serial No. | R940629LPB12 | Measurement Units | " H2O |

| Device Reading | Reference Device Reading | % Difference* |
|----------------|--------------------------|---------------|
| 0 | 0 | 0.00 |
| 5 | 5 | 0.00 |
| 10.1 | 10 | 1.00 |
| 14.9 | 15 | -0.67 |
| 20 | 20 | 0.00 |

* % difference shall not exceed +/- 5%

SOUTHERN ENVIRONMENTAL SCIENCES, INC.

PRESSURE MEASUREMENT DEVICE CALIBRATION FORM

| | | | |
|--------------|------------------|-------------------|------------|
| Device Type | Magnehelic | Calibration Date | 04/01/2003 |
| Range | 0 - 20" H2O (M3) | Calibrated by | K. Roberts |
| Manufacturer | Dwyer | Reference Device | Manometer |
| Serial No. | R940629LPD23 | Measurement Units | " H2O |

| Device Reading | Reference Device Reading | % Difference* |
|----------------|--------------------------|---------------|
| 0 | 0 | 0.00 |
| 5 | 5 | 0.00 |
| 10 | 10 | 0.00 |
| 15.2 | 15 | 1.33 |
| 19.6 | 20 | -2.00 |

* % difference shall not exceed +/- 5%

SOUTHERN ENVIRONMENTAL SCIENCES, INC.
THERMOMETER CALIBRATIONS

Calibrated By/Date: T. Wilson 3/31/03

ALL TEMPERATURES ARE DEGREES RANKIN

| ID No. | Type | Range | ICE BATH | | | TEPID WATER | | | BOILING WATER | | | HOT OIL | | |
|--------|------|---------|-----------|------|-------------|-------------|------|-------------|---------------|------|-------------|-----------|------|-------------|
| | | | STD Therm | Temp | Deg or Diff | STD Therm | Temp | Deg or Diff | STD Therm | Temp | Deg or Diff | STD Therm | Temp | Deg or Diff |
| T1 | PT | 2000° F | 495 | 496 | 0.2% | 539 | 537 | 0.1% | 672 | 670 | 0.2% | 860 | 861 | 0.3% |
| T2 | PT | 2000° F | 495 | 497 | 0.2% | 539 | 537 | 0.1% | 673 | 672 | 0.2% | 870 | 872 | 0.3% |
| T3 | PT | 2000° F | 495 | 497 | 0.2% | 539 | 538 | 0.1% | 673 | 671 | 0.3% | 870 | 872 | 0.2% |
| T4 | PT | 2000° F | 494 | 496 | 0.2% | 539 | 538 | 0.1% | 674 | 672 | 0.3% | 863 | 864 | 0.2% |
| T5 | PT | 2000° F | 494 | 496 | 0.2% | 539 | 538 | 0.2% | 672 | 670 | 0.2% | 860 | 862 | 0.2% |
| T6 | PT | 2000° F | 494 | 496 | 0.2% | 539 | 537 | 0.3% | 672 | 674 | 0.3% | 852 | 854 | 0.2% |
| T7 | PT | 2000° F | 495 | 497 | 0.2% | 539 | 538 | 0.3% | 673 | 671 | 0.2% | 853 | 854 | 0.3% |
| T8 | PT | 2000° F | 495 | 496 | 0.1% | 539 | 537 | 0.2% | 674 | 672 | 0.1% | 864 | 865 | 0.2% |
| T9 | PT | 2000° F | 495 | 497 | 0.1% | 539 | 538 | 0.3% | 673 | 671 | 0.1% | 854 | 856 | 0.3% |
| Lab 14 | BM | 212° F | 494 | 495 | 1° | 536 | 535 | 1° | 672 | 673 | 2° | - | - | - |
| 15 | BM | 250° F | 494 | 495 | 1° | 536 | 535 | 1° | 672 | 672 | 2° | - | - | - |
| 16 | BM | 220° F | 494 | 496 | 1° | 536 | 536 | 2° | 672 | 672 | 3° | - | - | - |
| SS110 | BM | 220° F | 494 | 496 | 1° | 540 | 539 | 2° | 670 | 672 | 2° | - | - | - |
| SS300 | PT | 2000° F | 495 | 497 | 0.2% | 540 | 538 | 0.1% | 674 | 672 | 0.2% | 850 | 852 | 0.2% |
| SS301 | PT | 2000° F | 495 | 497 | 0.2% | 540 | 538 | 0.2% | 672 | 670 | 0.1% | 856 | 858 | 0.2% |
| SS306 | PT | 2000° F | 495 | 496 | 0.2% | 540 | 538 | 0.2% | 672 | 670 | 0.2% | 856 | 858 | 0.2% |
| 2.5'PA | PT | 2000° F | 495 | 496 | 0.2% | 541 | 538 | 0.0% | 673 | 672 | 0.2% | 852 | 854 | 0.3% |
| 2.5'PB | PT | 2000° F | 495 | 497 | 0.2% | 541 | 538 | 0.0% | 672 | 674 | 0.3% | 856 | 858 | 0.3% |
| 3'P | PT | 2000° F | 495 | 497 | 0.2% | 541 | 539 | 0.1% | 673 | 675 | 0.2% | 858 | 860 | 0.3% |
| 3'INC | PT | 2000° F | 494 | 496 | 0.1% | 540 | 538 | 0.1% | 676 | 678 | 0.2% | 852 | 854 | 0.3% |
| 5'PA | PT | 2000° F | 494 | 496 | 0.3% | 540 | 539 | 0.0% | 672 | 674 | 0.3% | 856 | 858 | 0.2% |
| 5'PB | PT | 2000° F | 495 | 497 | 0.3% | 540 | 538 | 0.1% | 674 | 672 | 0.3% | 856 | 858 | 0.3% |
| 5'PC | PT | 2000° F | 495 | 497 | 0.3% | 540 | 538 | 0.2% | 674 | 672 | 0.1% | 856 | 858 | 0.3% |
| 5'VP | PT | 2000° F | 495 | 497 | 0.2% | 541 | 540 | 0.2% | 676 | 678 | 0.2% | 856 | 858 | 0.2% |
| 5'INC | PT | 2000° F | 494 | 496 | 0.3% | 542 | 540 | 0.1% | 674 | 676 | 0.1% | 850 | 852 | 0.3% |
| 8'PA | PT | 2000° F | 494 | 496 | 0.3% | 541 | 538 | 0.0% | 676 | 678 | 0.2% | 856 | 858 | 0.2% |
| 8'PB | PT | 2000° F | 494 | 495 | 0.3% | 541 | 539 | 0.1% | 676 | 678 | 0.3% | 856 | 858 | 0.2% |
| 10'P | PT | 2000° F | 494 | 495 | 0.2% | 541 | 539 | 0.0% | 674 | 676 | 0.3% | 854 | 856 | 0.2% |

Quality Control Limits: Impinger Thermometers ± 2°F, Bimetallic Thermometers(Bm) ± 5°F, Pyrometers/Thermocouples(PT) ± 1.5%

COMBUSTIBLE GAS DETECTOR CALIBRATION

INSTRUMENT

| | |
|--------------|----------|
| Manufacturer | Gas Tech |
| Model No. | GT105 |
| Serial No. | 9708311 |

CALIBRATION GAS DATA

| | Zero | Span |
|---------------------|----------|--------------|
| Gas Type | Zero Air | methane |
| Concentration (PPM) | 0 | 25,370 |
| Supplier | Airgas | Air Products |

CALIBRATION

| | Observed Conc. (PPM) | Actual Conc. (PPM) | Percent Diff. |
|------------------|----------------------|-----------------------|---------------|
| ZERO | 0 | 0 | 0 |
| SPAN | 50% LEL | 50% LEL | 0 |
| Response Time | 6 | | |
| Calibration Date | 8/26/03 | Signature: Ken Palast | |

Note: For methane 10,000 PPM = 20% LEL

COMBUSTIBLE GAS DETECTOR CALIBRATION

INSTRUMENT

| | |
|--------------|----------|
| Manufacturer | Gas Tech |
| Model No. | GT105 |
| Serial No. | 9709402 |

CALIBRATION GAS DATA

| | Zero | Span |
|---------------------|----------|--------------|
| Gas Type | Zero Air | Methane |
| Concentration (PPM) | 0 | 25,370 |
| Supplier | Air Gas | Air Products |

CALIBRATION

| | Observed Conc. (PPM) | Actual Conc. (PPM) | Percent Diff. |
|------------------|----------------------|------------------------|---------------|
| ZERO | 0 | 0 | 0 |
| SPAN | 50% LEL | 50% LEL | 0 |
| Response Time | 5.5 | | |
| Calibration Date | 8/26/03 | Signature: Ken Pollock | |

Note: For methane 10,000 PPM = 20% LEL

BEST AVAILABLE COPY

Southern Environmental Sciences, Inc.

1204 North Wheeler Street Plant City, Florida 33566 (813) 752-5014

TURBINE METER CALIBRATION

| | |
|------------------|------------|
| Turbine Meter No | 94-54464 |
| Pipot Cp | 0.99 |
| Calibration Date | 04/25/2003 |
| Serial No. | B. Nelson |

| | | Run 1 | Run 2 | Run 3 |
|--------------------------------|----|--------|--------|--------|
| Delta P Readings ("H2O) | P1 | 0.03 | 0.03 | 0.03 |
| | P2 | 0.03 | 0.03 | 0.02 |
| | P3 | 0.03 | 0.03 | 0.03 |
| | P4 | 0.03 | 0.03 | 0.03 |
| | P5 | 0.03 | 0.02 | 0.03 |
| | P6 | 0.03 | 0.03 | 0.03 |
| | P7 | 0.02 | 0.02 | 0.02 |
| | P8 | 0.02 | 0.03 | 0.03 |
| Avg. Sq. Rt. of Delta P ("H2O) | | 0.1653 | 0.1653 | 0.1653 |
| Temp Readings (Deg F) | T1 | 74 | 75 | 74 |
| | T2 | 74 | 75 | 75 |
| | T3 | 74 | 75 | 75 |
| | T4 | 74 | 75 | 75 |
| | T5 | 74 | 75 | 75 |
| | T6 | 74 | 75 | 76 |
| | T7 | 74 | 75 | 76 |
| | T8 | 75 | 75 | 75 |
| Avg. Temperature | | 74.125 | 75.0 | 75.1 |
| Static Pressure ("H2O) | | 0.68 | 0.65 | 0.64 |
| Barometric Pressure ("Hg) | | 30.02 | 30.02 | 30.02 |
| Moisture (%) | | 2.0 | 2.0 | 2.0 |
| Total Pressure ("Hg) | | 30.07 | 30.07 | 30.07 |
| Molecular Weight | | 28.54 | 28.54 | 28.54 |
| Duct Diameter (inches) | | 12 | 12 | 12 |
| Duct Area (sq. ft) | | 0.7854 | 0.7854 | 0.7854 |
| Duct Velocity (ft/min) | | 11.04 | 11.05 | 11.05 |
| Reference Flowrate (ACFM) | | 520.4 | 520.9 | 520.9 |
| Test Meter Flowrate (ACFM) | | 530 | 530 | 530 |
| Difference (%) | | 1.8 | 1.7 | 1.7 |

| | |
|------------------------|------|
| Average Difference (%) | 1.75 |
| Tolerance (%) | 5 |