2005 ANNUAL SOURCE TEST REPORT

Guadalupe Rubbish Disposal Company, Inc.
Landfill Gas Control - Flare - Source A-9
Facility Number A3294

Test Date: October 7, 2005

Submittal Date: December 5, 2005

Prepared for:

Waste Management, Inc.
Guadalupe Rubbish Disposal Company, Inc.
15999 Guadalupe Mines Road
San Jose, CA 94550

For submittal to:

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

Prepared by:

Shaw™ Shaw Environmental, Inc.
2360 Bering Drive
San Jose, California 95131-1121

Project 118095.01000000

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Facility Number A3294

The material and data in this report were reviewed by the undersigned.

Shaw™ Shaw Environmental, Inc.

William Johnston
Manager, Source Testing

Richard Merrill
Senior Air Quality Engineer

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1.0 Summary and Overview

1.1 Summary

Shaw Environmental, Inc. (Shaw) performed the source testing of the landfill gas flare designated as A-9, at the Guadalupe Rubbish Disposal Company, Inc. (GRDC, Inc.) facility located in San Jose, California. This report presents the results of the test program. Table 1 summarizes the source test information. Table 2 summarizes the test results compared to the emission limits. The flare met all compliance criteria.

Table 1. Source Test Information

Test Location:	Guadalupe Rubbish Disposal Company, Inc. 15999 Guadalupe Mines Rd. San Jose, CA 94550	Contact: Edward Pettit Tel: (408) 640-6700
Source Tested:	Enclosed Gas Flare (A-9)	
Source Test Date:	October 7, 2005	
Test Objective:	Determine compliance with Title V and Regulation 8, Rule 34 Flare: Permit Condition Number 6188	Emission Limits: NO_x: 15 ppmv@ 15% O_2 CO: 123 ppmv@ 15% O_2 NMOC: Destructive Efficiency greater than 98 percent or 30 ppmv @ 3% O_2, as methane
Test Performed By:	Shaw Environmental, Inc. 2360 Bering Drive San Jose, CA 95131	Contact: William R. Johnston Tel: (408) 382-5822 Fax: (408) 433-1912
Test Parameters:	Inlet—Landfill Gas O_2, N_2, CO_2, THC, HHV, F-Factor CH_4, NMOC, Landfill gas volumetric flow rate	Outlet—Flare NMOC, NO_x, CO, O_2, SO_2, THC, CH_4, Volumetric flow rate

Notes:

NO_x = oxides of nitrogen — *ppmv = parts per million by volume* — *% = percent*

CO = carbon monoxide — *O_2 = oxygen* — *F-Factor = fuel factor*

N_2 = nitrogen — *CO_2 = carbon dioxide* — *CH_4 = methane*

HHV= Higher Heating Value — *NMOC = non-methane organic compounds* — *THC= Total Hydrocarbons*

Table 2. Compliance Summary
Test date: October 7, 2005

Condition	Average Result	Emission Limit	Compliance Status
NO_x (ppmv @ 15% O_2)	8.2	16	In Compliance
CO (ppmv @ 15% O_2)	1.4	134	In Compliance
NMOC (ppmv @ 3% O_2, dry as methane)	< 2.4	30	In Compliance

1.2 Overview

Shaw, an approved California Air Resources Board (ARB) source test contractor, performed the source test program. The test program was designed to demonstrate compliance with the Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 34, and with Major Facility Review (MFR) Permit Condition Number 6188 (See Appendix A). The source test was performed on the flare exhaust to assess the emissions of NMOC, NO_x, O_2, and CO. Additionally, three landfill gas (LFG) samples were collected. One sample was analyzed for non-methane hydrocarbons (NMOC) and methane (CH_4) while all three were analyzed for total reduced sulfurs (TRS), which were used as a surrogate for SO_2 analysis (all TRS is assumed to be oxidized to SO_2 in the flare.)

The source test was conducted on October 7, 2005. Sampling was performed by Mr. Bill Johnston of Shaw. The BAAQMD was notified of the test via a letter dated September 28, 2005 that included the Source Test Protocol. The BAAQMD did not have a representative present for the test. A copy of the Source Test Protocol is presented in Appendix B. Source test data are located in Appendix C. A copy of Shaw's ARB Independent Contractor Program certification is included in Appendix D.

The source test program for collecting the required performance data is discussed in Section 2; the source testing results are presented in Section 3; the source test procedures are presented in Section 4; and data review is discussed in Section 5. Supporting documentation is presented in the appendices.

1.3 Source Operating Conditions

The flare is an LFG Specialties Model EF9.535I12 enclosed gas flare with a maximum capacity of 2,000 standard cubic feet per minute (scfm) of LFG. The LFG volumetric flow rate is measured with a mass flow meter. Three thermocouples are located at the top, middle, and bottom of the flare exhaust stack to provide temperature indication for control of the combustion temperature. The flare operated at an average temperature of 1,495 degrees Fahrenheit (°F) for the source test measured from the bottom thermocouple. The LFG landfill gas flow rate and flare operating temperature are continuously recorded on a data acquisition system (DAS) and strip paper chart recorder.

Process data documenting the operation of the flare are contained in Appendix E. A picture of the flare is presented in Appendix F.

2.0 Source Test Program

The objective of the flare source test was to demonstrate compliance with requirements of MFR Permit Condition Number 6188 for LFG parameters NO_x, CO, NMOC, and other gaseous constituents.

Measurements of the flare's emissions were conducted at the flare exhaust. LFG was sampled at the inlet header. Table 3 provides a test matrix of the parameters tested at each sample location. U.S. Environmental Protection Agency (EPA), American Society for Testing and Materials (ASTM) and BAAQMD test methods were used. The source test program consisted of three 30-minute runs to measure gaseous emissions in the flare exhaust and one 30-minute run for the inlet header. The continuous emission monitoring system (CEMS) equipment was leak-checked before sampling began. Each instrument was calibrated before and after each sampling run with EPA protocol calibrated gas standards. The CEMS data are presented in Appendix G.

Concurrent with the exhaust sampling, Shaw collected three integrated 5-liter Tedlar® bag samples of the inlet LFG for analysis. One sample was analyzed for NMOC, HHV, F-Factor, and additional fixed gases while all three were analyzed for TRS, which was used to calculate the outlet SO_2. The analytical laboratory results are contained in Appendix H.

The flare operating temperature and LFG flow rate were manually recorded on a field data sheet at the beginning and end of each run. The outlet volumetric flow rate was calculated using the fuel flow rate, Btu, exhaust gas O_2 content, and the F-Factor according to EPA Method 19.

Results of the tests for the LFG and flare exhaust are summarized in Section 3. Compliance with the NMOC limit was demonstrated by verifying that the concentrations of NMOC were less than 30 ppmv at 3 percent O_2 as methane. The source test demonstrated that the flare operates with criteria pollutant emissions below the BAAQMD emission limits.

Table 3. Source Test Methods and Instrumentation

Method	Inlet (fuel) Analyte	Exhaust Analyte	Instrumentation/ Laboratory	Principle
ASTM D-1945/D-3588, EPA Method 25 C	Fixed Gases, Btu, F-Factor NMOC	—	Atmospheric Analysis & Consulting, Inc.	GC/TCD GC/FID
ASTM D-5504	Sulfur Compounds	—	Atmospheric Analysis & Consulting, Inc.	GC/SCD
BAAQMD Method ST-6	—	CO	Horiba VIA 510	IR
BAAQMD Method ST-7		THC/CH_4/NMOC	TECO Model 51	FID
BAAQMD Method ST-13A		NO_x	Ecophysics Model 70E	Chemiluminescence
BAAQMD Method ST-14		O_2	Teledyne	Fuel Cell
EPA Method 19		Flow rate, dscfm	—	Algorithm

Notes:
THC = total hydrocarbons
dscfm = dry standard cubic feet per minute
FID = flame ionization detection
GC = gas chromatography
TCD = thermal conductivity detector
IR = infrared
SCD = sulfur chemiluminescence detector

3.0 Source Test Results

The source test was performed on the LFG fuel and at the flare exhaust. Table 4 presents the results of the LFG fuel analysis and flare operating parameters as recorded by the DAS. The flare operating temperature was measured from the bottom thermocouple. Three LFG samples were drawn from the inlet header one of which was analyzed for Btu, F-Factor, and additional fixed gases. All three were analyzed for TRS. Table 5 presents the results of the source test. Triplicate 30-minute runs were performed on the flare exhaust to assess the NMOC, NO_x, and CO emissions. Concurrent with each run, the O_2 content of the exhaust gas was also measured. NMOC concentrations were calculated by subtracting methane concentrations collected in integrated Tedlar® bag samples from the total hydrocarbon concentration measurement. SO_2 was calculated by assuming all TRS is oxidized into SO_2 in the flare. Concentrations of CO and NO_x are reported in units of ppmv corrected to 15 percent O_2. Concentrations of NMOC are reported in units of ppmv corrected to 3 percent O_2.

Table 4. GRDC, Inc.
Flare Operating Conditions and LFG Analysis
Test date: October 7, 2005

	Run 1	Run 2	Run 3	Average
Time	1005-1035	1043-1113	1122-1152	—
Flare Temperature (°F)	1,495	1,495	1,495	1,495
Recorded Fuel Flow Rate (scfm)	639	629	620	629
Heat Input (MMBtu/day)	430.6	423.9	417.8	424.1
O_2 (%)[1]	—	2.8	—	—
CO_2 (%)[1]	—	35	—	—
N_2 (%)[1]	—	16	—	—
Methane (%)[1]	—	46.1	—	—
NMOC (ppmv)[1]	—	3,476	—	—

[1] Only one sample of landfill gas was analyzed for this value.

Table 5. GRDC, Inc.
Source Test Results – Landfill Flare Exhaust A-9
Test date: October 7, 2005

	Run 1	Run 2	Run 3	Average	Emission Limit
Time	1005-1035	1043-1113	1122-1152	—	—
Fuel Factor	9,297	9,297	9,297	9,297	—
Flare Temperature (°F)	1,495	1,495	1,495	1,495	—
Landfill Gas Fuel Flow Rate (scfm)	639	629	620	629	—
Exhaust Flow Rate (dscfm)	7,422	7,428	7,723	7,524	—
O_2 (%)	13.1	13.2	13.6	13.3	—
NO_x					
NO_x (ppmv)	10.7	10.8	10.1	10.5	—
NO_x (ppmv @ 15% O_2)	8.1	8.3	8.2	8.2	16
NO_x (lb/MMBtu)	0.032	0.032	0.032	0.032	—
CO					
CO (ppmv)	2.2	1.4	1.8	1.8	—
CO (ppmv @ 15% O_2)	1.7	1.1	1.5	1.4	134
CO (lb/MMBtu)	0.004	0.003	0.003	0.003	—
Hydrocarbons as Methane					
THC	<1	<1	<1	<1	—
CH_4	<1	<1	<1	<1	—
NMOC (ppmv)	< 1	< 1	< 1	< 1	—
NMOC (ppmv corrected to 3% O_2)	< 2.3	< 2.3	< 2.5	< 2.4	30
NMOC Removal Efficiency (%)[1]	—	> 99.7	—	—	≥ 98 [2]
Sulfurs					
TRS (ppmv)[3]	65	50	66	60	—
SO_2 (ppmv)[4]	5.6	4.3	5.3	5.1	—

[1] Only one sample of landfill gas was analyzed to calculate this value.

[2] The efficiency requirement is utilized only if the outlet NMOC concentration is greater than 30 ppm @3% oxygen.

[3] Measured in the LFG.

[4] Assumes all reduced sulfur oxidized to SO_2.

4.0 Test Procedures

Shaw conducted the source test according to ASTM, BAAQMD and EPA test methods as described below.

4.1 Continuous Emissions Monitoring

Shaw measured stack gas constituent concentrations, using its CEMS sampling van, according to BAAQMD methods for NMOC, NO_x, CO, and O_2. Figure 1 is a schematic diagram of the Shaw CEMS.

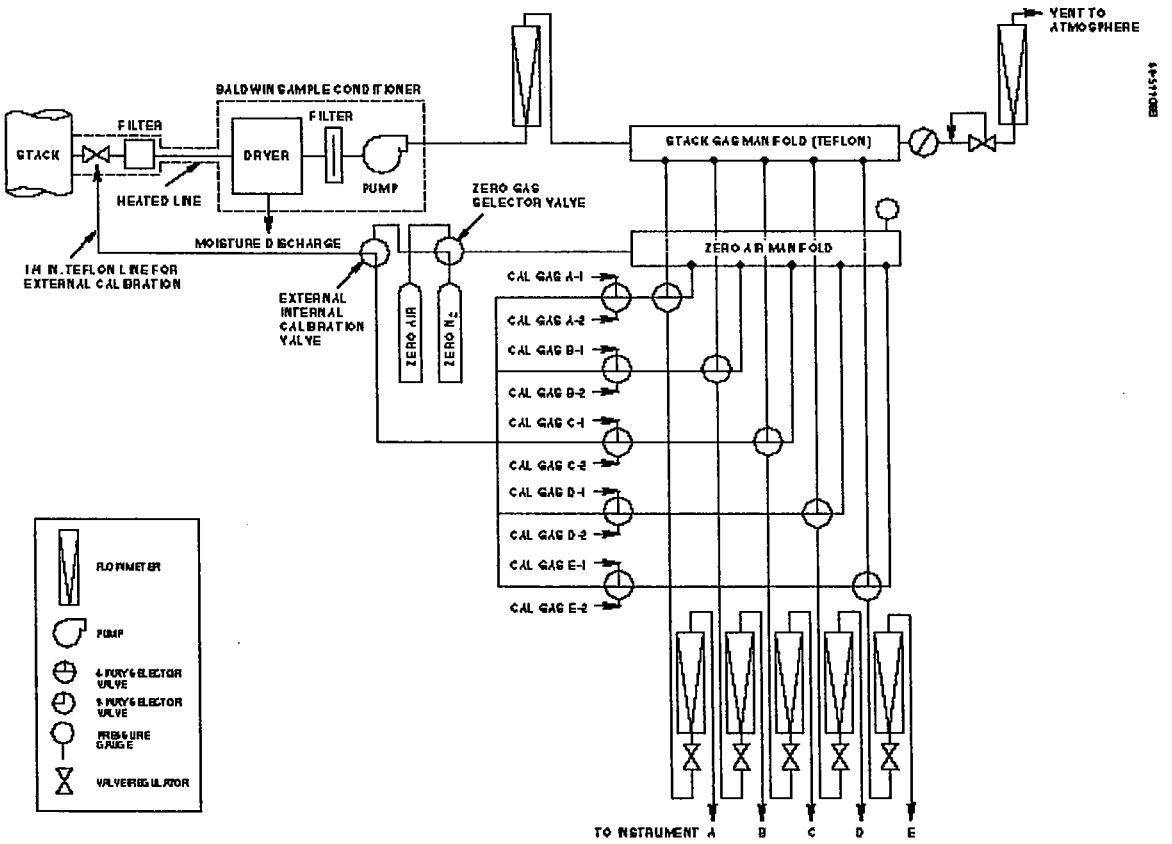

Figure 1. Schematic Diagram of the Shaw CEMS

In this source test, a sample pump was used to extract the sample gas continuously from each source through a stainless-steel sampling probe equipped with an in-stack filter, followed by a heated Teflon™ sample line and a Baldwin sample conditioner. The sample line between the sample point and the sample conditioner was heated to 250°F to maintain the gas stream temperatures above the water dew point. Gas flow was controlled with a back-pressure regulator. The sample flow rate to each instrument was controlled with individual rotameters. Instrument output was recorded with a strip chart recorder and a digital data logger, the STRATA data acquisition system. Table 6 lists the specifications of the instruments used in the source test.

Table 6. CEMS Instrument Specifications

Gas	Analyzer/Manufacturer	Principle of Operation	Operating Range
O_2	Teledyne 326A	Fuel Cell	0-25%
THC	TECO Model 51	Flame Ionization	0-50 ppmv as CH_4
NO_x	Ecophysics 70E	Chemiluminescence	0-50 ppmv
CO	Horiba VIA 510	NDIR	0-100 ppmv

Note:
NDIR = nondispersive infrared

Before the start of testing, the sampling system was assembled at the site and leak-checked. Calibrations were performed on each of the instruments using certified calibration gases and a gas dilution system.

A span drift check was performed at the end of each run to measure analyzer drift. The drift check measurement uses a zero gas (N_2) and a high calibration gas. All of the instrument checks conducted for this source test were within the drift limit criterion of 3 percent, as specified in the test methods. Reported values include a correction for the recorded instrument drift, as specified in EPA Method 6C. Copies of data logger printouts, calibration data sheets, strip charts, and gas certificates of analysis, are presented in Appendix G.

4.2 Landfill Gas

Shaw measured LFG constituent concentrations according to EPA and ASTM test methods. The samples were collected from a sample port located at the inlet header. The samples were collected in 5-liter Tedlar® bags through Teflon™ tubing. The sample line was purged with sample gas prior to sampling. The sample flow rate was controlled with rotameters to collect 30-minute integrated samples. The samples were kept out of sunlight and analyzed within the method holding times. Analytical results are presented in Appendix H.

5.0 Data Review

The Air Quality Group within Shaw performed a quality assurance review of the source test data and report. The review included the following activities:

- Review of the general text
- Check of calculation algorithms for correctness
- Review of CEMS data extraction
- Determination that all supporting documentation is present

A detailed manual review of the data was completed. Based on our data review, Shaw concludes the following:

- The source test procedures were followed, and all data were reduced and entered into the reporting spreadsheets properly.
- The instrument drift and other measures of instrument performance were deemed acceptable.

As a result, the data are considered to be acceptable.

Limitations

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Appendix A
Major Facility Review Permit

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Guadalupe Rubbish Disposal Company
Facility #A3294

Facility Address:
15999 Guadalupe Mines Road
San Jose, CA 95120

Mailing Address:
P.O. Box 20957
San Jose, CA 95160

Responsible Official	**Facility Contact**
Joe Morse, District Manager	Joe Morse
(408) 268-1670	(408) 268-1670

Type of Facility:	Municipal Solid Waste Landfill	BAAQMD Permit Division Contact:
Primary SIC:	4953	Ted Hull, Air Quality Engineer II
Product:	Landfill Operations	

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Jack P. Broadbent
Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

June 24, 2005
Date

V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

Condition #6188
FOR S-9: LANDFILL WITH GAS COLLECTION SYSTEM

1. The Permit Holder shall comply with the following waste acceptance and disposal limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
   a. Except for temporary emergency situations approved by the Local Enforcement Agency, the total waste accepted and placed at the landfill shall not exceed 3,650 tons in any day. (Basis: Regulation 2-1-301)
   b. The total cumulative amount of all waste placed in the landfill shall not exceed 16.4 million tons. Exceedance of the cumulative tonnage limit is not a violation of the permit and does not trigger the requirement to obtain a New Source review permit, if the operator can, within 30 days of the date of discovery of the exceedance, provide documentation to the District demonstrating, in accordance with BAAQMD Regulation 2-1-234.3, that the limit should be higher. (Basis: Regulation 2-1-234.3)

2. The S-9 Guadalupe Landfill shall be equipped with a landfill gas collection system. Wells, collectors, and adjustment valves shall not be disconnected, removed, or completely closed, without prior written authorization from the District, unless the Permit Holder complies with all applicable provisions of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (basis: Regulation 2-1-301, Regulation 8-34-301.1, Regulation 8-34-305)

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a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. The Permit Holder shall apply for and receive an Authority to Construct before modifying the landfill gas system described below. Increasing or decreasing the number of vertical wells, changing the length of horizontal collectors, or moving the locations of vertical wells or horizontal collectors are considered modifications that are subject to the Authority to Construct requirement. Adding or modifying risers, laterals, or header pipes are not subject to this Authority to Construct requirement. The authorized number of landfill gas collection system components is the baseline count listed below plus any components added and minus any components decommissioned pursuant to Part 2b as evidenced by start-up/shut-down notification letters submitted to the District.

Vertical Wells:	45
Horizontal Collectors:	9

b. The Permit Holder has been issued an Authority to Construct (Application #9780) for the landfill gas collection system modifications described below.

Installation of up to 20 new vertical wells
Decommissioning of up to 12 vertical wells
Installation of up to 10 horizontal trench collectors
Decommissioning of up to 4 horizontal trench collectors

3. The landfill gas collection system described in Part 2 above shall be operated continuously. Wells shall not be disconnected or removed from operation nor shall isolation or adjustment valves be closed without written authorization from the District, unless the Permit Holder complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118. (basis: Regulation 8-34-301, Regulation 8-34-305)

4. In order to demonstrate compliance with the above requirements, the S-9 Permit Holder shall maintain the following records:
   a. Monthly records of the quantity of refuse accepted and placed in the landfill.
   b. For areas of the landfill not controlled by a landfill gas collection system, the Permit Holder shall maintain a record of the date that waste was initially placed in the area or cell.

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c. The cumulative amount of waste placed in each uncontrolled area or cell on a monthly basis.

d. If the Permit Holder plans to exclude an uncontrolled area or cell from the collection system requirement, the types and amounts of all non-decomposable waste placed in the area or cell shall be recorded. If non-decomposable waste makes up less than 100% of the contents of a given cell, that percentage shall be noted.

e. The initial operation date for each new landfill gas well and collector.

f. An accurate map of the landfill that indicates the locations of all refuse boundaries and the locations of all wells and collectors as identified in the Collection and Control System Design Plan. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least every six months to indicate changes in refuse boundaries and to include any newly installed wells and collectors.

These records shall be kept on-site and be made available for inspection to District personnel upon request for a period of five years from the date on which a record was made. (basis: Cumulative Increase, Regulation 2-6-501, Regulation 8-34-304)

5. All landfill gas collected by the gas collection system for S-9 shall be abated at all times by either the Enclosed Flare A-9 or the adjacent gas recovery and control facility (Gas Recovery Systems, P#11669 or successor operation). Under no circumstances shall raw landfill gas be vented to the atmosphere. This limitation does not apply to unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 or to inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (basis: Regulations 8-34-301 and 8-34-303, 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))

6. The A-9 Flare shall be operated continuously during all times that landfill gas is being vented to the flare. (Basis: Regulation 8-34-301, 40 CFR 60.752(b)(2)(iii), 60.753(e), and 60.755(e))

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7. A temperature monitor with readout display and continuous recorder shall be installed and maintained on the flare. One or more thermocouples shall be placed in the primary combustion zone of the flare and shall accurately indicate flue gas temperature at all times. Temperature charts shall be retained for five years and made readily available to District Staff upon request. (Basis: Regulation 8-34-501, Regulation 2-6-501, 40 CFR 60.756(b))

8. The combustion zone temperature of the flare shall be maintained at a minimum temperature of 1450 degrees F, averaged over any 3-hour period. This minimum temperature shall be adjusted via a minor permit revision, if a source test demonstrates compliance with all applicable requirements at a different temperature. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Regulation 8-34-301, Toxic Risk Management, 40 CFR 60.758(c)(1)(i))

9. NOx emissions from the A-9 flare shall not exceed 16 ppmv of NO_x, expressed as NO_2 at 15% oxygen on a dry basis. (Basis: RACT, Cumulative Increase)

10. CO emissions from the A-9 flare shall not exceed 134 ppmv of CO at 15% oxygen on a dry basis. (Basis: RACT, Cumulative Increase)

11. A flow meter to measure gas flow into the flare shall be installed prior to operation and maintained in good working condition. (Basis: Cumulative Increase, 40 CFR 60.756(b))

12. The flare shall be equipped with both local and remote alarms, automatic combustion air control, and automatic start/restart system. (Basis: Regulation 8-34-301.1)

13. The A-9 Landfill Gas Flare destruction efficiency for total non-methane organic compounds (NMOC) shall not be less than 98% by weight unless the outlet NMOC concentration is less than 30 ppmv, expressed as methane at 3% oxygen on a dry basis. (Basis: Regulation 8-34-301.3)

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FOR S-9: LANDFILL WITH GAS COLLECTION SYSTEM

14. In order, to demonstrate compliance with parts #9, #10, and #13 above, and Regulation 9-1-302, the Permit Holder shall ensure that a District approved source test is conducted annually on the A-9 Landfill Gas Flare. As a minimum, the annual source test shall determine the following:
    a. landfill gas flow rate to the flare (dry basis);
    b. concentrations (dry basis) of carbon dioxide (CO_2), nitrogen (N_2), oxygen (O_2), total hydrocarbons (THC), methane (CH_4), and total non-methane organic compounds (NMOC) in the landfill gas;
    c. stack gas flow rate from the flare (dry basis);
    d. concentrations (dry basis) of NOx, CO, SO_2, THC, CH_4, NMOC, and O_2 in the flare stack gas;
    e. NMOC destruction efficiency achieved by the flare; and
    f. the average combustion temperature in the flare during the test period.

    Each annual source test shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and to the Source Test Section within 60 days of the test date. (basis: RACT, Cumulative Increase, Regulations 8-34-301.3 and 8-34-412, Regulation 9-1-302)

15. On rainless operating days, water shall be applied as necessary and at least 2 times per full operational day to all unpaved roadways and active soil removal and fill areas associated with this facility to suppress dust emissions. On operating days when rain has fallen in the last 24 hours, water shall be applied as necessary to prevent visible dust emissions. (basis:Regulation 2-1-403)

16. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as to prevent visible particulate emissions from vehicle traffic or wind. (basis:Regulation 2-1-403)

17. Visible dust emissions from any part of the facility shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance. (basis Regulation 6-301, Regulation 1-301)

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18. In order to demonstrate compliance with parts #16 and #17, the operator of this facility shall keep records of all site watering and road cleaning activities in a District approved log on a daily basis. These records shall be kept on-site and be made available for inspection to District personnel upon request for a period of five years from the date on which a record was made. (basis:Regulation 2-1-403)

19. The Permit Holder shall limit the quantity of VOC soil handled per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. VOC soil is any soil that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppmw or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 20 of these conditions. Soil containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 is not subject to Parts 19 and 20 of these conditions. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log:
    a. Daily records of the amount of VOC soil handled at the landfill. The total amount (in pounds per day) represents Q in the equation in part c of this condition. (see below)
    b. Daily records of the VOC content of all soils handled at the landfill. The VOC content (C in the equation below) is expressed as parts per million by weight total carbon.
    c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:
    $E = Q \times C / 1{,}000{,}000$

    These records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date on which a record was made. (basis: Regulation 8-2-301)

VI. Permit Conditions

Condition #6188
FOR S-9: LANDFILL WITH GAS COLLECTION SYSTEM

*20. Handling Procedures for Soil Containing Volatile Organic Compounds

a. The procedures listed below in subparts b-l do not apply if the following criteria are satisfied. However, the record keeping requirements in subpart m, below, are applicable.

i. The Permit Holder has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211). The handling of soil containing VOCs in concentrations below the "contaminated" level is subject to Part 19 above.

ii. The Permit Holder has no documentation to prove that soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.

b. The Permit Holder shall provide verbal notification to the Compliance and Enforcement Division of the Permit Holder's intention to accept contaminated soil at the facility at least 24 hours in advance of receiving the contaminated soil. The Permit Holder shall provide an estimate of the amount of contaminated soil to be received, the degree of contamination (range and average VOC Content), and the type or source of contamination.

c. Any soil received at the facility that is known or suspected to contain volatile organic compounds (VOCs) shall be handled as if the soil were contaminated, unless the Permit Holder receives test results proving that the soil is not contaminated. To prove that the soil is not contaminated, the Permit Holder shall collect soil samples in accordance with Regulation 8-40-601 within 24 hours of receipt of the soil by the facility. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.

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FOR S-9: LANDFILL WITH GAS COLLECTION SYSTEM

i. If these test results indicate that the soil is still contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the Permit Holder must continue to handle the soil in accordance with the procedures set forth in subparts e.-l., below, until the soil has completed treatment or has been placed in a final disposal location and adequately covered. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.

ii. If these test results indicate that the soil – as received at the facility – has an organic content of 50 ppmw or less, then the soil may be considered to be not contaminated and need not be handled in accordance with the procedures listed in subparts e.-l. below.

d. Any contaminated soil received at the facility shall be clearly identified as contaminated soil, shall be handled in accordance with subparts e.-l. below, and shall be segregated from non-contaminated soil. Contaminated soil lots may not be co-mingled, blended, or otherwise mixed with non-contaminated soil lots prior to treatment, reuse, or disposal. Mixing soil lots in an attempt to reduce the overall concentration of the contaminated soil or to circumvent any requirements or limits is strictly prohibited.

e. On-site handling of contaminated soil shall be limited to no more than 2 on-site transfers per soil lot. For instance, unloading soil from off-site transport vehicles into a temporary storage pile is 1 transfer. Moving soil from a temporary storage to a staging area is 1 transfer. Moving soil from a temporary storage pile to a final disposal site is 1 transfer. Moving soil from a staging area to a final disposal site is 1 transfer. Therefore, unloading soil from off-site transport into a temporary storage pile and then moving the soil from that temporary storage pile to the final disposal site is allowed. Unloading soil from off-site transport into a staging area and then moving the soil from that staging area to the final disposal site is allowed. However, unloading soil from off-site transport to a temporary storage pile, moving this soil to a staging area, and then moving the soil again to a final disposal site is 3 on-site transfers and is not allowed.

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f. If the contaminated soil has an organic content of less than 500 ppmw, the contaminated soil shall be treated, deposited in a final disposal site, or transported off-site for treatment within 90 days of receipt at the facility.

g. If the contaminated soil has an organic content 500 ppmw or more, the contaminated soil shall be treated, deposited in a final disposal site, or transported off-site for treatment within 45 days of receipt at the facility.

h. All active storage piles shall meet the requirements of Regulation 8-40-304 by using water sprays, vapor suppressants or approved coverings to minimize emissions. The exposed surface area of any active storage pile (including the active face at a landfill) shall be limited to 6000 ft^2. The types of storage piles that may become subject to these provisions include (but are not limited to) truck unloading areas, staging areas, temporary stockpiles, soil on conveyors, bulldozers or trucks, the active face of a landfill, or other permanent storage pile at the final disposal location.

i. All inactive storage piles shall meet the requirements of Regulation 8-40-305 including the requirement to cover contaminated soil during periods of inactivity longer than one hour. The types of storage piles that may become subject to these provisions include (but are not limited to) soil on trucks or other on-site equipment, staging areas, temporary stockpiles, and the permanent storage pile at the final disposal location. District approved coverings for inactive storage piles include continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) or encapsulating vapor suppressants (with re-treatment as necessary to prevent emissions).

j. The Permit Holder must:

   i. Keep contaminated soil covered with continuous heavy-duty plastic sheeting (in good condition, joined at the seams, and securely anchored) whenever soil is to be stored in temporary stockpiles or during on-site transport in trucks. Soil in trucks shall not be left uncovered for more than 1 hour.

   ii. Establish a tipping area for contaminated soils near the active face that is isolated from the tipping area for other wastes.

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iii. Spray contaminated soil with water or vapor suppressant immediately after dumping the soil from a truck at the tipping area.
iv. Ensure that all contaminated soil is transferred from the tipping area to the active face immediately after spraying with water or vapor suppressant.
v. Ensure that contaminated soil in the tipping area is not disturbed by subsequent trucks. Trucks shall not drive over contaminated soil in the tipping area or track contaminated soil out of the tipping area on their wheels.
vi. Spray contaminated soil on the active face with water or vapor suppressant (to keep the soil visibly moist) until the soil can be covered with an approved covering.
vii. Limit the area of exposed soil on the active face to no more than 6000 ft^2.
viii. Ensure that contaminated soil spread on the active face is completely covered on all sides with one of the following approved coverings: at least 6 inches of clean compacted soil, at least 12 inches of compacted garbage, or at least 12 inches of compacted green waste.
ix. Ensure that covering of soil on the active face is completed within one hour of the time that the soil was first dumped from a truck at the tipping area.

k. Contaminated soil shall not be used as daily, intermediate, or final cover material for landfill waste operations unless the requirements of Regulation 8, Rule 40, Sections 116 or 117 have been satisfied.
l. Contaminated soil is considered to be a decomposable solid waste pursuant to Regulation 8, Rule 34. All contaminated soil disposed of at a site shall be included in any calculations of the amount of decomposable waste in place that are necessary for annual reporting requirements or for purposes of 8-34-111 or 8-34-304.
m. The Permit Holder shall keep the following records for each lot of soil received, in order to demonstrate on-going compliance with the applicable provisions of Regulation 8, Rule 40.

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i. For all soil received by the facility (including soil with no known contamination), record the arrival date at the facility, the soil lot number, the amount of soil in the lot, the organic content or organic concentration of the lot (if known), the type of contamination (if any), and keep copies of any test data or other information that documents whether the soil is contaminated (as defined in 8-40-205) or not contaminated, with what, and by how much.

ii. If the soil is tested for organic content after receipt by the facility, record the sampling date, test results, and the date that these results were received.

iii. For all on-site handling of contaminated soil, use a checklist or other approved method to demonstrate that appropriate procedures were followed during all on-site handling activities. One checklist shall be completed for each day and for each soil lot (if multiple lots are handled per day).

iv. For soil aerated in accordance with 8-40-116 or 117 record the soil lot number, the amount of soil in the lot, the organic content, the final placement date, the final placement location, and describe how the soil was handled or used on-site.

v. For final disposal at a landfill, record on a daily basis the soil lot number, the amount of soil placed in the landfill, the disposal date, and the disposal location.

All records shall be retained for at least 5 years from the date of entry and shall be made available for District inspection upon request.

[Basis: Regulation 8-40-301, 8-40-304 and 8-40-305]

21. In accordance with the provisions of Regulation 2-2-302, should the calculated facility precursor organic compound (POC) emissions ever equal or exceed 50 tons per year, the facility owner/operator shall reimburse the District with emission reduction credits for all POC offsets provided from the District Small Facility Banking Account. (basis: Offsets)

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Condition #6188
FOR S-9: LANDFILL WITH GAS COLLECTION SYSTEM

22. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting periods and report submittal due dates for these reports shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F. of the MFR Permit for this site. In addition, the semi-annual reports required by the NESHAP for Municipal Solid Waste Landfills (40 CFR Part 63 Subpart AAAA) shall be submitted on the same schedule. At the discretion of the facility, the Regulation 8-34-411 report may be combined with the semi-annual MFR monitoring report and the NESHAPS report as a single combined report as long as it is clearly labeled as such and it contains all the required elements of both reports. (basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))

Condition #7649
FOR S-5: WOOD DEBRIS STOCKPILES

1. Operation of S-5 shall not exceed 12 hours within any consecutive 24-hour period. (basis: Cumulative Increase)

2. A District approved logbook of hours of operation of S-5 shall be maintained on a daily basis. Records shall be kept for a period of at least five years from the date of entry and shall be made readily available to District staff upon request. (basis: Cumulative Increase)

3. S-5 feed stockpiles and stockpile roadways shall be abated by A-5 water spray at a minimum of 5 gpm as required to minimize particulate emissions. (basis: Regulation 2-1-403)

4. Observation for visible particulate emissions is required each time material to added to or removed from the Wood Debris Stockpiles. If visible emissions are detected, the operator of the source shall take the necessary corrective action to stop the emissions. (basis: Regulation 6-301, 6-305, Regulation 2-1-403)

VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-5: WOOD DEBRIS STOCKPILE AND A-5: WATER SPRAY

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition #7649 Part 4	P/E	Observation of Operations
Usage	BAAQMD Condition #7649 Part 1	Y		12 hours during any 24 hour period	BAAQMD Condition #7649 Part 2	P/D	Daily Record of Operating Hours

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-6: SHREDDED WOOD STORAGE STOCKPILES AND LOADOUT, A-6: WATER SPRAY

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition #7650 Part 2	P/E	Observation of Operations
Usage	BAAQMD Condition #7650 Part 1	Y		12 hours during any 24 hour period	BAAQMD Condition #7650 Part 2	P/D	Daily Record of Operating Hours

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installa-tion Dates	BAAQMD 8-34-304.1	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #6188, Part 4	P/E	Records
Collection System Installa-tion Dates	BAAQMD 8-34-304.2	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #6188, Part 4	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Collection System Installation Dates	BAAQMD 8-34-304.3	Y		For Any Uncontrolled Areas or Cells: collection system components must be installed and operating within 60 days after the uncontrolled area or cell accumulates 1,000,000 tons of decomposable waste	BAAQMD 8-34-501.7 and 501.8 and BAAQMD Condition #6188, Part 4	P/E	Records
Collection System Installation Dates	40 CFR 60.753 (a)(2) and 60.755 (b)(2)	Y		For Inactive/Closed Areas: collection system components must be installed and operating by 2 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2), and 60.759(a)(3)	P/E	Records
Collection System Installation Dates	40 CFR 60.753 (a)(1) and 60.755 (b)(1)	Y		For Active Areas: Collection system components must be installed and operating by 5 years + 60 days after initial waste placement	40 CFR 60.758(a), (d)(1) and (d)(2)	P/E	Records
Gas Flow	BAAQMD 8-34-301 and 301.1 and BAAQMD Condition #6188, Parts 3, 5	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.1 and BAAQMD Condition #6188, Part 4	P/E	Records of Collection System Downtime and Updates to Collection and Control System Design Plan

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.1	Y		Landfill gas collection system shall operate continuously and all collected gases shall be vented to a properly operating control system	BAAQMD 8-34-501.10 and 508	C	Gas Flow Meter and Recorder (every 15 minutes);
Gas Flow	40 CFR 60.753(a) and (e)	Y		Operate a Collection System in each area or cell and vent all collected gases to a properly operating control system	40 CFR 60.756(b)(2) (i or ii) and 60.758(c)(2)	C	Gas Flow Meter and Recorder (every 15 minutes)
Collection and Control Systems Shutdown Time	BAAQMD 8-34-113.2	Y		240 hours/year nor 5 consecutive days	BAAQMD 8-34-501.1	P/D	Operating Records
Collection System Startup Shutdown or Malfunc-tion	40 CFR 60.755(e)	Y		5 days per event	40 CFR 60.7(b), 60.757(f)(2) and (f)(4)	P/D	Operating Records (all occurrences and duration of each)
Periods of Inopera-tion for Para-metric Monitors	BAAQMD 1-523.2	Y		15 consecutive days/incident and 30 calendar days/12 month period	BAAQMD 1-523.4	P/D	Operating Records for All Parametric Monitors

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Continuous Monitors	40 CFR 60.13(e)	Y		Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Operating Records for All Continuous Monitors
Wellhead Pressure	BAAQMD 8-34-305.1	Y		< 0 psig	BAAQMD 8-34-414, 501.9 and 505.1	P/M	Monthly Inspection and Records
Wellhead Pressure	40 CFR 60.753(b)	Y		< 0 psig	40 CFR 60.755(a)(3), 60.756(a)(1), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	BAAQMD 8-34-305.2	Y		< 55 °C	BAAQMD 8-34-414, 501.9 and 505.2	P/M	Monthly Inspection and Records
Temperature of Gas at Wellhead	40 CFR 60.753(c)	Y		< 55 °C	40 CFR 60.755(a)(5), 60.756(a)(3), and 60.758(c) and (e)	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	BAAQMD 8-34-305.3 or 305.4	Y		N_2 < 20% **OR** O_2 < 5%	BAAQMD 8-34-414, 501.9 and 505.3 or 505.4	P/M	Monthly Inspection and Records
Gas Concentrations at Wellhead	40 CFR 60.753(c)	Y		N_2 < 20% **OR** O_2 < 5%	40 CFR 60.755(a)(5), 60.756(a)(2), and 60.758(c) and (e)	P/M	Monthly Inspection and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Well Shutdown Limits	BAAQMD 8-34-116.2	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-116.3	Y		24 hours per well	BAAQMD 8-34-116.5 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.4	Y		No more than 5 wells at a time or 10% of total collection system, whichever is less	BAAQMD 8-34-117.6 and 501.1	P/D	Records
Well Shutdown Limits	BAAQMD 8-34-117.5	Y		24 hours per well	BAAQMD 8-34-117.6 and 501.1	P/D	Records
TOC (Total Organic Com-pounds Plus Methane)	BAAQMD 8-34-301.2	Y		1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 503	P/Q	Quarterly Inspection of collection and control system components with OVA and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-303	Y		500 ppmv as methane at 2 inches above surface	BAAQMD 8-34-415, 416, 501.6, 506 and 510	P/M, Q, and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspec-tion Times for Leaking Areas, and Records
TOC	40 CFR 60.753(d)	Y		<500 ppmv as methane at 5-10 cm from surface	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	P/M, Q and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspec-tion Times for Leaking Areas, and Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.3	Y		98% removal by weight OR < 30 ppmv, dry basis @ 3% O_2, expressed as methane (applies to A-9 only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 6188, Part 14	P/A	Annual Source Tests and Records
Non-Methane Organic Compounds (NMOC)	40 CFR 60.752(b)(2)(iii)(B)	Y		98% removal by weight OR < 20 ppmv, dry basis @ 3% O_2, expressed as hexane (applies to A-9 only)	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 6188, Part 14	P/A	Annual Source Tests and Records
Temperature of Combustion Zone (CT)	BAAQMD Condition # 6188, Part 8	Y		CT $\geq$ 1400 °F, averaged over any 3-hour period (applies to A-9 only)	BAAQMD 8-34-501.3 and 507, SIP 8-34-501.3 and BAAQMD Condition # 6188, Part 7	C	Temperature Sensor and Recorder (continuous)
Total Carbon	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis only for handling of soil containing $\leq$ 50 ppmv of volatile organic compounds	BAAQMD Permit Condition #6188, Part 19	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Contaminated Soil Limits	BAAQMD Permit Condition #6188, Part 20	Y		≤ 50 ppmw organics; or ≤ 50 ppmw TPH as gasoline, ≤ 50 ppmw TPH as diesel, and ≤ 50 ppmw TPH as motor oil; or IBP of all organics ≥ 302 degrees F	BAAQMD Permit Condition #6188, Part20.m	P/E	Records of Soil Test Data
Amount of VOC Soil Aerated or Used as Cover	BAAQMD 8-40-116.1	N		1 cubic yard per project	BAAQMD Condition # 6188, Part20.m.	P/E	Records
Amount of VOC Soil Aerated or Used as Cover	BAAQMD 8-40-116.2	N		8 cubic yards per project, provided organic content ≤ 500 ppmw and limited to 1 exempt project per 3 month period	BAAQMD 8-40-116.2 and BAAQMD Condition # 6188, Part20.m.	P/E	Records
Amount of Accidental Spillage	BAAQMD 8-40-117	N		Soil Contaminated by Accidental Spillage of ≤ 5 gallons of Liquid Organic Compounds		N	
Total Aeration Project Emissions	BAAQMD 8-40-118	N		150 pounds per project and toxic air contaminant emissions per year <BAAQMD Table 2-1-316 limits	BAAQMD Condition # 6188, Part20.m.	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Amount of VOC Soil Aerated or Used as Cover	BAAQMD 8-40-301 and BAAQMD Condition #6188, Part20.k.	N		Prohibited for Soil with Organic Content >50 ppmw unless exempt per BAAQMD 8-40-116, 117, or 118	BAAQMD Condition # 6188, Part20.m.	P/E	Records
Amount of VOC Soil Aerated or Used as Cover	SIP 8-40-301	Y[1]		Organic Content ppmw / Amount yd^3/day: 50-99 / 600; 100-499 / 120; 500-999 / 60; 1000-1999 / 30; 2000-2999 / 15; 3000-3999 / 10; 4000-4999 / 8; 5000+ / 0.1	BAAQMD Condition # 6188, Part20.m.	P/E	Records
Contaminated Soil Handling	BAAQMD Condition #6188, Part20.e.	N		Limited to 2 on-site transfers per lot of contaminated soil	BAAQMD Condition # 6188, Part20.m.	P/E	Records
Contaminated Soil On-Site Storage Time	BAAQMD Condition #6188, Part20.f.-g.	N		If organic content is: < 500 ppmw, storage time ≤ 90 days; If organic content is: ≥ 500 ppmw, storage time ≤ 45 days	BAAQMD Condition # 6188, Part20.m.	P/E	Records
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for 3 minutes in any hour (applies to S-9)	BAAQMD Permit Condition #6188, Part 18	P/D	Records of Site Watering and Road Cleaning

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		Ringelmann No. 1 for 3 minutes in any hour (applies to A-9)	None	N	N/A
FP	BAAQMD 6-310	Y		≤ 0.15 grains/dscf (applies to A-9 only)	None	N	N/A
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes and ≤ 0.25 ppm for 60 min. and ≤0.05 ppm for 24 hours (applies to A-9 only)	None	N	N/A
SO_2	BAAQMD 9-1-302	Y		≤ 300 ppm (dry basis) (applies to A-9 only)	BAAQMD Condition # 6188, Part 14	P/A	Annual Source Test
NOx	BAAQMD Condition #6188, Part 9	Y		≤ 16 ppm (as NO_2 @ 15% O_2, dry basis) (applies to A-9 only)	BAAQMD Condition # 6188, Part 14	P/A	Annual Source Test
CO	BAAQMD Condition #6188, Part 10	Y		≤ 134 ppm (@ 15% O_2, dry basis) (applies to A-9 only)	BAAQMD Condition # 6188, Part 14	P/A	Annual Source Test
Site Watering	BAAQMD Condition #6188, Part 15	Y		Site Watering: 2 times daily; all unpaved roads and active soil removal and fill areas (rainless operating days only)	BAAQMD Condition #6188, Part 18	P/D	Records
Road Cleaning	BAAQMD Condition #6188, Part 16	Y		Paved Road Cleaning: (as necessary)	BAAQMD Condition #6188, Part 18	P/D	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – C
Applicable Limits and Compliance Monitoring Requirements
S-9: LANDFILL WITH GAS COLLECTION SYSTEM
A-9: LANDFILL GAS FLARE

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H_2S	BAAQMD 9-2-301	N		Property Line ground level limits $\leq$ 0.06 ppm Averaged over 3 minutes and $\leq$ 0.03 ppm Averaged over 60 minutes	None	N	N/A
Startup Shutdown or Mal-function Pro-cedures	40 CFR 63.6(e)	Y	1/16/04	Minimize Emissions by Implementing SSM Plan	40 CFR 63.1980(a-b)	P/E	Records (all occurrences, duration of each, corrective actions)

1 This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Table VII – D
Applicable Limits and Compliance Monitoring Requirements
S-18: MATERIALS RECOVERY OPERATION – DEBRIS SORTING SYSTEM

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD Regulation 6-301	Y		Ringelmann 1.0 for 3 minutes in any hour	BAAQMD Condition #18258 Part 2	C	Continuous Observation of Source in Operation
Opacity	BAAQMD Condition #18258 Part 1	Y		Ringelmann 1.0	BAAQMD Condition #18258 Part 2	C	Continuous Observation of Source in Operation

Appendix B
Source Test Protocol

Shaw Environmental, Inc.
2360 Bering Drive
San Jose, California 95131
408-382-5800
FAX: 408-433-1912

Shaw™ Shaw Environmental, Inc.

To: Ken Kunaniec, Tim Underwood, BAAQMD Date: September 28, 2005
Subject: Source Test Protocol & Test Notification

SOURCE TEST PROTOCOL
FOR
Guadalupe Rubbish Disposal Facility
FLARE

Shaw Environmental, Inc. will perform compliance testing on one flare (A-9) located at the Guadalupe Rubbish Disposal Facility in San Jose, California. The purpose of the test is to demonstrate the performance of the landfill gas flare as specified by the Bay Area Air Quality Management District (BAAQMD) Title V permits and Regulation 8, Rule 34. This protocol is to inform the BAAQMD of the planned test date and testing procedures. Shaw Environmental is approved by the California Air Resources Board (ARB) as an independent contractor to conduct compliance emission testing.

Source Test Information

Test Location:	Guadalupe Rubbish Disposal Facility 15999 Guadalupe Mines Road San Jose, CA 94550 BAAQMD Facility Number 3294	Contact: Flare: Mark McKeever Tel: 925-443-7910
Source Tested:	Flare A-9	
Test Objective:	Determine compliance with Title V and Regulation 8, Rule 34 Flare: Permit Condition Number 6188	Emission Limits: NO_x: 16 ppm @15% O_2 CO: 134 ppmv @15% O_2 NMOC: > 98% destruction efficiency or < 30 ppm as methane at 3% O_2
Test Performed By:	Shaw Environmental, Inc. 2360 Bering Drive San Jose, CA 95131	Contact: William R. Johnston Tel: (408) 382-5822
Test Parameters:	Inlet O_2, CO_2, N_2, THC, CH_4, NMOC, HHV, F-Factor, Volumetric flow rate Outlet NMOC, NOx, CO, O_2, SO_2, THC, CH_4, Volumetric flow rate	

SOURCE DESCRIPTION

The flare is an LFG Specialties Model EF9.535I12, 70 MMBtu/hour, 2000 scfm enclosed gas flare designated by the BAAQMD as A-9. A Yokogawa data acquisition system with local digital display and recorder provided the record of flare temperatures

SCOPE OF WORK

Triplicate 30-minute runs will be performed according to the test methods presented below.

Landfill Gas Flare (A-9) Source Test

A source test will be performed on one flare (A-9) located at the Guadalupe Rubbish Disposal Facility. The flare source test shall determine the following parameters as specified in the facility's Title V permit condition number 6188 and BAAQMD Regulation 8, Rule 34. All landfill gas samples shall be drawn from the main landfill gas header.

Landfill Gas:

- Determine landfill gas flow rate (dry basis);
- The landfill gas shall be analyzed for HHV, CO_2, N_2, O_2, THC, TRS, CH_4, and NMOC. All concentrations shall be reported on a dry basis.

Stack Exhaust:

- Stack gas flow rate from the flare using EPA Method 19 or equivalent (dry basis);
- Concentrations (dry basis) of NMOC, THC, CH_4, SO_2, CO, NO_x, and O_2 in the flare stack gas. SO_2 will be calculated based on the sulfur content of the landfill gas.

Source Parameters:

- NMOC destruction efficiency achieved by the flare;
- Record the average gas flow rate and combustion zone temperature in the flare during the test period.

Test Methods and Run Times:

The following source test methods (each compliant with the requirements of the BAAQMD) will be utilized to determine the emissions from landfill gas and the flare for each test condition:

- Three (3) thirty-minute test runs for NO_x (BAAQMD Method ST-13A), CO (BAAQMD Method ST-6), NMOC (BAAQMD Method ST-7), and O_2 (BAAQMD Method ST-14) at the flare exhaust;
- Three samples will be collected of the landfill gas. One sample of landfill gas will be analyzed for F-factor, HHV, C_1 through C_6, hydrocarbons, O_2, CO_2, and N_2 by ASTM D-1945, NMOC by EPA Method 25C. All three samples will be analyzed for TRS according to ASTM D5504 as a surrogate for direct SO_2 monitoring;
- EPA Method 19 will be used to calculate the stack gas volumetric flow rate.

Permit Limits

The source test on the landfill gas flare will demonstrate the following limits:

- Emissions of NO_x shall not exceed 16 parts per million by volume (ppmv) corrected to 15 percent O_2 on a dry basis;
- Emissions of CO shall not exceed 134 ppmv corrected to 15 percent O_2 on a dry basis;
- Emissions of SO_2 shall not exceed 300 ppm (dry);
- The flare destruction efficiency of NMOC shall not be less than 98 percent by weight, unless the outlet NMOC concentration is less than 30 ppmv, expressed as methane at 3 percent oxygen on a dry basis;
- The combustion zone temperature of the flare shall be maintained at a minimum of 1,450 degrees Fahrenheit (F).

Landfill gas fuel analysis

Integrated Tedlar bag samples will be collected at the inlet to the flare. Samples will be collected concurrently with the outlet sampling. Samples will be analyzed within 72 hours.

Continuous Emission Monitoring

Single point sampling will be performed. All analyzers will be checked for calibration before and after each run. Emission monitoring data will be recorded on strip charts and a data logger. Methane concentrations will be determined by passing sample gas through an activated carbon scrubber prior to the hydrocarbon analyzer. Hydrocarbon emissions will be measured and reported as methane.

Process parameters

Flare process parameters including the fuel gas flow rate and the flare operating temperature will be measured and recorded during each run using the flare gas measurement system.

REPORT

The final report is due to the BAAQMD 60 days after testing has occurred. The report will describe the tests that were conducted, the operating conditions of the source during the test, and the emission results. Concentrations of NOx and CO will be reported corrected to 15 percent O_2, while NMOC will be reported corrected to 3 percent O_2. Additionally the NMOC destruction efficiency will be reported. All raw data and sample calculations used to obtain the reported results will be included so that the accuracy of the reported results can be verified from the report. The flare process information will be submitted in the report.

TEST SCHEDULE

The source test is scheduled for October 7, 2005.

Appendix C
Source Test Data

Emission Rate Calculations
Stack Gas Flow Rate and Fuel Usage, EPA Method 19

EMISSION RATE CALCULATION

Facility: Guadalupe Landfill
Source : Flare
Test date: 10/7/2005

Temperature Std: 70
Pressure Std: 29.92
O2% correction: 15 NOx & CO
O2% correction: 3 NMOC

Time	1005-1035		1043-1113		11:22-11:52		Avg		Permit
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Limits
Flare Temp (F)	1,495		1,495		1,495		1,495		
Fuel factor	9,297		9,297		9,297		9,297		
Oxygen (%)		13.1		13.2		13.6		13.3	
Flowrate (dscfm)	639	7,422	629	7,428	620	7,723	629	7,524	
Oxides of Nitrogen									
MW = 46									
NOx, ppm		10.7		10.8		10.1		10.5	
NOx, ppm corrected to 15% O2		8.1		8.3		8.2		8.2	16
NOx, lb/hr		0.567		0.573		0.557		0.565	
NOx, lb/MMBtu		0.032		0.032		0.032		0.032	
Carbon Monoxide									
MW = 28									
CO, ppm		2.2		1.4		1.8		1.8	
CO, ppm corrected to 15% O2		1.7		1.1		1.5		1.4	134
CO, lb/hr		0.071		0.045		0.060		0.059	
CO, lb/MMBtu		0.004		0.003		0.003		0.003	
Hydrocarbons as methane									
MW = 16									
THC, ppm		< 1.	460,214	< 1.		< 1.	460,214	< 1.0	
THC, lb/hr		< 0.018	719	< 0.018		< 0.019	719	< 0.019	
Methane, ppm		< 1.	460,000	< 1.		< 1.	460,000	< 1.	
Methane, lb/hr		< 0.018	718	< 0.018		< 0.019	718	< 0.019	
NMOC, ppm		< 1.	3476	< 1.		< 1.	3,476	1.0	
NMOC, ppm corrected to 3% O2		< 2.3		< 2.3		< 2.5		< 2.4	30
NMOC, lb/hr		< 0.018	5.4	< 0.018		< 0.019	5.4	< 0.019	
Efficiency %									
NMOC			>99.7%						98

Calculations

lb/hr = ppm x MW x Qs x 8.223x10-5 / (Tstd + 460)
ppm corrected @ O2 = ppm measured x [(20.9 - O2% correction) / (20.9% O2 - O2 measured)]
lb/MMBtu = F-factor x MW x [1.3711x10-6 / (Tstd + 460)] x [(20.9 /20.9 -O2%)] x ppm
Efficiency (%) = in (lb/hr)-out (lb/hr)/in (lb/hr) x 100

Methane was not measured at the outlet because the THC was below analyzer reporting limit

Stack Gas Flow Rate ---- Fuel Usage

EPA Method 19

Facility Guadalupe Landfill
Source Flare
Date 10/7/2005

		Run 1	Run 2	Run 3	Average
Gross Caloric Value (Btu/ft3)	Btu/ft3	468.0	468.0	468.0	468.0
Stack Oxygen	%	13.1	13.2	13.6	13.3
Fuel factor @ 70 F	DSCF/MMBtu	9,297.0	9,297.0	9,297.0	9,297.0
Corrected Fuel Rate (SCFM) @ Tstd	SCFM	639.0	629.0	620.0	629.3
Fuel Flowrate (SCFH) @ Tstd	SCFH	38,340	37,740	37,200	37,760
Million Btu per minute	MMBtu/min	0.299	0.294	0.290	0.295
Heat Input (MMBtu/hr)	MMBtu/hr	17.9	17.7	17.4	17.7
Heat Input (MMBtu/day)	MMBtu/day	430.6	423.9	417.8	424.1
Stack Gas Flow Rate (dscfm)	dscfm	7,422	7,428	7,723	7,524

Calculations

SCFM = CFM * (Tstd + 460) * gas PSIA) / 14.7 / (gas F + 460)
SCFH = SCFM * 60
MMBtu/min = SCFM * Btu/ft3 / 1,000,000
MMBtu/hr = MMBtu/min * 60
DSCFM = Fuel factor * MMBtu/min * (20.9 / (20.9-O2%)) * (Tstd + 460) / 530

Notes
Corrected Fuel Rate (SCFM) @ Tstd data is from the system data aquistion

Guadalupe Landfill
Flare Source Test
Calculations of SO2 Emission

Parameters	Run 1	Run 2	Run 3	Average	Units
Fuel Input	639	629	620	629.3	scfm
Sulfur (as H_2S)	65	50	66	60.3	ppmv
R	0.7302	0.7302	0.7302	0.7302	atm*ft^3/lbmol*R
Fuel Input	1.6574	1.6315	1.6081	1.6323	lbmol/min
Sulfur Input	0.000108	8.15727E-05	0.000106	0.00010	lbmol/min
Sulfur Outlet	0.000108	8.15727E-05	0.000106	0.00010	lbmol/min
SO_2 MW	64.06	64.06	64.06	64.1	lb/lbmol
SO_2 Outlet	0.006901	0.005225548	0.006799	0.00631	lb/min
SO_2 Outlet	0.414073	0.313532874	0.407942	0.3785	lb/hr
Exhaust Flow rate (dscfm)	7422	7428	7723	7524.3	dscfm
SO_2 Outlet	5.62	4.25	5.32	5.06	ppmv

Appendix D
ARB Independent Contractor Program Certification

State of California

Air Resources Board

Approved Independent Contractor

Shaw Environmental, Inc.

This is to certify that the company listed above has been approved by the Air Resources Board to conduct compliance testing pursuant to section 91207, title 17, California Code of Regulations, until June 30, 2006 for those test methods listed below:

ARB Source Test Methods:
1, 2, 3, 4, 5, 8, 100 (CO, CO_2, NO_x, O_2, SO_2, THC)
Visible Emissions Evaluation

William V. Loscutoff, Chief
Monitoring and Laboratory Division

90 56165

Appendix E
Process Data

DAS Printouts
Field Data Sheet

Run averages corrected for bias

Operator: Bill Johnston

Plant Name: Guadelupe Landfill

Location: Flare

Run	O2 %	CO ppm	THC ppm	NOx ppm
1	13.1	2.2	0.5	10.7
2	13.2	1.4	0.4	10.8
3	13.6	1.8	0.6	10.1

Landfill Process Data Sheet

Landfill: Guadalupe

Test date: 10-7-05

Source: (Flare) IC Engine, Turbine
circle one

Landfill Gas Data	Run 1		Run 2 11:16		Run 3 11:53	
Time	10:05	10:35	10:44	~~11:19~~	11:23	~~11:53~~
Methane (%)	53.5					
HHV based on methane						
~~F-factor~~ based on methane						
O2 (%)	0					
Landfill Gas Rate (scfm)	646	633	628	624	616	614
~~Engine (KW)~~						
Condensate Rate (gpm)						
Flare Temp (F)	1495	1493	1500	1502	1490	1500

Thermocouple Measurement Location Top Middle (Bottom)
circle one

HHV = methane (%) x 1018

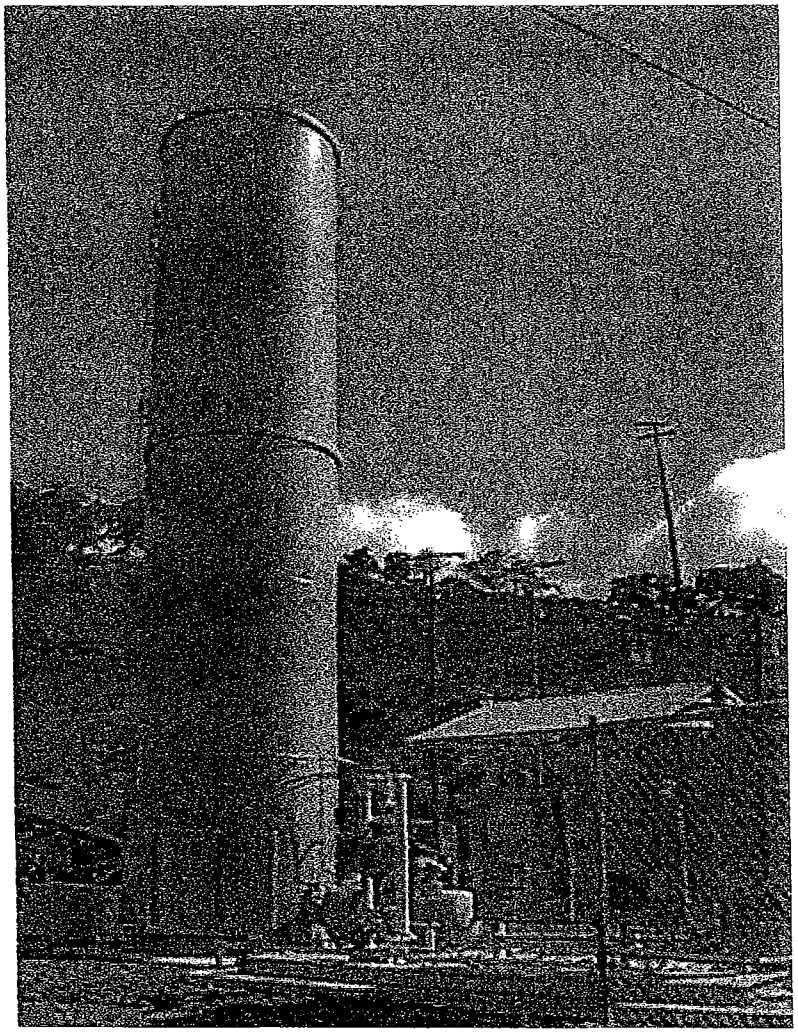
DAQSTANDARD	R6.04	
Data Viewer	R6.04	
Shaw	becky	833-98024-****

Device Type	DX100		
Serial No.	S5D200387		
File Message			
Time Correction	None		
Starting Condition	Auto		
Dividing Condition	Auto		
Meas Ch.	2		
Math Ch.	1		
Data Count	7452		
Sampling Interval	120.000 sec		
Start Time	2005/09/3(18:08:00	0.000	
Stop Time	2005/10/11 02:30:00	0.000	
Trigger Time	2005/10/0[18:30:00	0.000	
Trigger No.	3611		
Damage Check	Not Damaged		

Converted Group 1 - 1

		Ch.	CH01		CH02				
		Tag	LARE TEMP		LFG FLOW				
		Unit	F		SCFM				
Date	Time	sec	MIN	MAX	MIN	MAX			
2005/10/07	10:00:00	0.000	1485	1504	645	655			
2005/10/07	10:02:00	0.000	1488	1502	642	655		temp	flow
2005/10/07	10:04:00	0.000	1495	1502	641	653	Run 1	1495	639
2005/10/07	10:06:00	0.000	1495	1500	637	652			
2005/10/07	10:08:00	0.000	1481	1500	638	654			
2005/10/07	10:10:00	0.000	1490	1505	638	654			
2005/10/07	10:12:00	0.000	1495	1499	637	649			
2005/10/07	10:14:00	0.000	1494	1496	635	644			
2005/10/07	10:16:00	0.000	1491	1495	637	651			
2005/10/07	10:18:00	0.000	1487	1498	635	646			
2005/10/07	10:20:00	0.000	1496	1507	636	643			
2005/10/07	10:22:00	0.000	1486	1496	630	644			
2005/10/07	10:24:00	0.000	1493	1501	630	642			
2005/10/07	10:26:00	0.000	1492	1495	630	640			
2005/10/07	10:28:00	0.000	1494	1499	628	639			
2005/10/07	10:30:00	0.000	1495	1499	623	639			
2005/10/07	10:32:00	0.000	1493	1496	627	638			
2005/10/07	10:34:00	0.000	1491	1496	622	640			
2005/10/07	10:36:00	0.000	1491	1497	626	636			
2005/10/07	10:38:00	0.000	1490	1495	628	637			
2005/10/07	10:40:00	0.000	1495	1505	626	637			
2005/10/07	10:42:00	0.000	1488	1502	625	637		temp	flow
2005/10/07	10:44:00	0.000	1489	1503	628	636	Run 2	1495	629
2005/10/07	10:46:00	0.000	1485	1504	624	636			
2005/10/07	10:48:00	0.000	1485	1494	627	636			
2005/10/07	10:50:00	0.000	1494	1504	626	639			
2005/10/07	10:52:00	0.000	1485	1504	629	637			
2005/10/07	10:54:00	0.000	1485	1503	625	635			
2005/10/07	10:56:00	0.000	1495	1502	625	636			
2005/10/07	10:58:00	0.000	1494	1496	621	632			
2005/10/07	11:00:00	0.000	1491	1495	624	636			
2005/10/07	11:02:00	0.000	1492	1494	623	631			
2005/10/07	11:04:00	0.000	1493	1504	624	633			
2005/10/07	11:06:00	0.000	1495	1505	625	634			
2005/10/07	11:08:00	0.000	1491	1495	621	633			
2005/10/07	11:10:00	0.000	1490	1494	624	634			
2005/10/07	11:12:00	0.000	1494	1504	622	634			
2005/10/07	11:14:00	0.000	1486	1500	620	633			
2005/10/07	11:16:00	0.000	1489	1506	618	632			
2005/10/07	11:18:00	0.000	1489	1501	618	631			
2005/10/07	11:20:00	0.000	1487	1492	621	630		temp	flow
2005/10/07	11:22:00	0.000	1491	1503	618	631	Run 3	1495	620
2005/10/07	11:24:00	0.000	1494	1504	616	631			
2005/10/07	11:26:00	0.000	1490	1496	616	629			
2005/10/07	11:28:00	0.000	1489	1501	612	625			
2005/10/07	11:30:00	0.000	1492	1500	613	628			
2005/10/07	11:32:00	0.000	1491	1495	618	628			
2005/10/07	11:34:00	0.000	1491	1503	616	628			
2005/10/07	11:36:00	0.000	1498	1505	617	628			
2005/10/07	11:38:00	0.000	1486	1498	615	625			
2005/10/07	11:40:00	0.000	1490	1506	615	628			
2005/10/07	11:42:00	0.000	1486	1499	615	623			
2005/10/07	11:44:00	0.000	1486	1504	615	623			
2005/10/07	11:46:00	0.000	1486	1505	613	627			
2005/10/07	11:48:00	0.000	1486	1497	613	622			
2005/10/07	11:50:00	0.000	1495	1502	610	622			
2005/10/07	11:52:00	0.000	1491	1495	606	619			
2005/10/07	11:54:00	0.000	1491	1495	610	619			
2005/10/07	11:56:00	0.000	1495	1503	610	619			

Appendix F
Site Picture



GUADALUPE LANDFILL FLARE

Appendix G
Continuous Emission Monitoring Data

Data Acquisition
Strip Chart Records
Calibration Gas Certificates of Analysis

STRATA Configuration Page 1
10-07-2005 09:42:33
File Name: C:\STRATA\GUADLPE.STR

Operator:	Bill Johnston
Plant Name:	Guadelupe Landfill
Location:	Flare
Run Length:	30 minutes
Sample Rate:	40 per minute
Average Calibration Results:	1 minutes
Automatic Sequence, Calibration Error:	No
Automatic Sequence, System Bias:	No
Max Response Time:	Manual
Max Response Time:	1 minutes
Traverse During Run:	No

Active	Chan.	Analyte Name	Units	Span Units	Span Volts	Offset Volts
Yes	1	O2	%	25	1	0
Yes	3	CO	ppm	100	1	0
Yes	4	THC	ppm	50	10	0
Yes	5	NOx	ppm	50	10	0

Measurement System Preparation Table

Gas Name	Reference Cylinder Numbers 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
O2	Z	H														
CO	Z		H													
THC	Z			H				L								
NOx	Z				H											

R1 – 10:05 – 10:35

R2 – 10:43 – 11:17

R3 – 11:22 – 11:52

Gas Name	Zero Reference Cylinder No.	Conc	ID Number	Low Reference Cylinder No.	Conc	ID Number
O2	1	0		99	999	
CO	1	0		99	999	
THC	1	0		8	15	Environics
NOx	1	0		99	999	

Gas Name	Mid Reference Cylinder No.	Conc	ID Number	High Reference Cylinder No.	Conc	ID Number
O2	99	999	999999	2	19.04	CC8445
CO	99	99	9999999	3	85.1	CC211732
THC	99	99	9999	4	45	AAL4576
NOx	99	99	9999	5	45.2	SA18044

Seq Num	Calibration Error Test Sequence O2	CO	THC	NOx
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Seq Num	Calibration Error Valve Sequence 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Seq Num	System Bias Check Sequence O2	CO	THC	NOx
1	Zero	Zero	Zero	Zero
2	High	High	High	High
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Seq Num	System Bias Valve Sequence 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	X															
2		X	X	X	X											
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Initial System Bias Check, Run 1 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 09:57:47	6.965	18.97	6.917	4.797
10-07-2005 09:58:47	0.082	-0.22	-0.092	-0.008
10-07-2005 09:59:46	-0.014	-0.23	-0.092	-0.008
10-07-2005 10:00:47	5.317	34.73	22.265	23.790
10-07-2005 10:01:46	18.501	84.81	44.917	45.292
10-07-2005 10:02:47	19.057	84.37	45.025	45.289

Initial System Bias Check for Run 1

Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare

	Reference Cylinder Numbers	
	Zero	Span
O2		CC8445
CO		CC211732
THC		AAL4576
NOx		SA18044

Date/Time 10-07-2005 10:03:07 PASSED

Analyte	O2	CO	THC	NOx
Units	%	ppm	ppm	ppm
Zero Ref Cyl	0.000	0.00	0.000	0.000
Zero Cal	0.000	0.00	0.000	0.000
Zero Avg	-0.009	-0.23	-0.092	-0.008
Zero Bias%	0.0%	0.2%	0.2%	0.0%
Zero Drift%				
Span Ref Cyl	19.040	85.10	45.000	45.200
Span Cal	19.040	85.10	45.000	45.200
Span Avg	19.075	84.35	45.059	45.269
Span Bias%	0.1%	0.8%	0.1%	0.1%
Span Drift%				

System Bias Check End

Test Run 1 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 10:04:08	15.409	18.65	7.806	14.828
10-07-2005 10:05:09	13.079	1.33	0.490	10.970
Begin calculating run averages				
10-07-2005 10:06:08	12.759	1.81	0.473	10.799
10-07-2005 10:07:09	13.044	2.05	0.491	10.381
10-07-2005 10:08:08	13.108	2.23	0.497	10.276
10-07-2005 10:09:08	13.077	2.27	0.491	10.418
10-07-2005 10:10:09	13.094	2.35	0.487	10.420
10-07-2005 10:11:08	13.112	2.40	0.486	10.330
10-07-2005 10:12:08	13.207	2.47	0.491	10.193
10-07-2005 10:13:09	13.118	2.41	0.491	10.454
10-07-2005 10:14:08	13.102	2.38	0.499	10.503
10-07-2005 10:15:09	12.911	2.30	0.491	11.020
10-07-2005 10:16:08	12.919	2.34	0.490	10.901
10-07-2005 10:17:08	13.114	2.36	0.492	10.510
10-07-2005 10:18:09	13.233	2.34	0.507	10.268
10-07-2005 10:19:08	13.106	2.28	0.490	10.682
10-07-2005 10:20:08	12.951	2.21	0.490	10.800
10-07-2005 10:21:09	13.092	2.26	0.506	10.713
10-07-2005 10:22:08	13.210	2.21	0.490	10.549
10-07-2005 10:23:09	13.103	2.15	0.490	10.722
10-07-2005 10:24:08	13.163	2.14	0.490	10.606
10-07-2005 10:25:08	13.075	2.06	0.490	10.996
10-07-2005 10:26:09	13.087	2.05	0.488	10.960
10-07-2005 10:27:08	13.151	2.02	0.489	10.873
10-07-2005 10:28:09	13.162	1.98	0.489	10.904
10-07-2005 10:29:07	13.139	1.96	0.489	10.816
10-07-2005 10:30:08	13.134	1.90	0.484	10.792
10-07-2005 10:31:09	13.138	1.97	0.489	10.655
10-07-2005 10:32:08	13.159	1.96	0.467	10.801
10-07-2005 10:33:08	13.125	1.84	0.488	10.642
10-07-2005 10:34:09	13.023	1.80	0.478	11.061
10-07-2005 10:35:08	12.946	1.72	0.384	11.001
Run Averages	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 10:35:35	13.088	2.14	0.486	10.675

Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare
Test Run 1 End

Final System Bias Check, Run 1 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 10:36:47	2.305	1.89	0.097	-0.012
10-07-2005 10:37:46	0.034	1.00	0.097	-0.012
10-07-2005 10:38:47	-0.050	0.20	0.075	-0.012
10-07-2005 10:39:46	8.307	52.12	30.760	32.499
10-07-2005 10:40:47	18.837	84.51	45.485	44.821

Final System Bias Check for Run 1
Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare

	Reference Cylinder Numbers	
	Zero	Span
O2		CC8445
CO		CC211732
THC		AAL4576
NOx		SA18044

Date/Time 10-07-2005 10:41:46 PASSED

Analyte	O2	CO	THC	NOx
Units	%	ppm	ppm	ppm
Zero Ref Cyl	0.000	0.00	0.000	0.000
Zero Cal	0.000	0.00	0.000	0.000
Zero Avg	-0.055	0.07	0.077	-0.012
Zero Bias%	0.2%	0.1%	0.2%	0.0%
Zero Drift%	-0.2%	0.3%	0.3%	0.0%
Span Ref Cyl	19.040	85.10	45.000	45.200
Span Cal	19.040	85.10	45.000	45.200
Span Avg	19.116	84.51	45.539	44.809
Span Bias%	0.3%	0.6%	1.1%	0.8%
Span Drift%	0.2%	0.2%	1.0%	-0.9%
Ini Zero Avg	-0.009	-0.23	-0.092	-0.008
Ini Span Avg	19.075	84.35	45.059	45.269
Run Avg	13.088	2.14	0.486	10.675
Co	-0.032	-0.08	-0.008	-0.010
Cm	19.096	84.43	45.299	45.039
Correct Avg	13.059	2.23	0.490	10.721

System Bias Check End

Test Run 2 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 10:42:47	15.390	14.76	6.594	13.072
Begin calculating run averages				
10-07-2005 10:43:47	12.926	0.33	0.488	11.077
10-07-2005 10:44:46	12.932	0.49	0.488	11.187
10-07-2005 10:45:47	12.939	0.63	0.486	11.264
10-07-2005 10:46:46	13.003	0.75	0.483	11.169
10-07-2005 10:47:47	13.031	0.86	0.497	11.106
10-07-2005 10:48:47	13.264	1.03	0.490	10.604
10-07-2005 10:49:46	13.256	1.10	0.523	10.907
10-07-2005 10:50:47	13.052	1.05	0.476	11.196
10-07-2005 10:51:47	13.047	1.12	0.490	11.023
10-07-2005 10:52:46	13.192	1.18	0.489	10.819
10-07-2005 10:53:47	13.111	1.19	0.458	11.153
10-07-2005 10:54:46	13.161	1.24	0.477	11.005
10-07-2005 10:55:47	13.098	1.25	0.491	11.080
10-07-2005 10:56:47	13.098	1.27	0.480	11.110
10-07-2005 10:57:46	13.120	1.30	0.479	11.158
10-07-2005 10:58:47	13.137	1.36	0.488	11.026
10-07-2005 10:59:47	13.135	1.38	0.451	11.039
10-07-2005 11:00:46	13.027	1.41	0.492	11.402
10-07-2005 11:01:47	13.010	1.38	0.494	11.212
10-07-2005 11:02:46	13.142	1.41	0.472	10.956
10-07-2005 11:03:47	13.218	1.42	0.476	10.818
10-07-2005 11:04:47	13.234	1.44	0.479	10.927
10-07-2005 11:05:46	13.686	2.17	0.574	9.911
10-07-2005 11:06:47	13.965	2.14	0.596	9.920
10-07-2005 11:07:47	13.766	1.87	0.730	9.599
10-07-2005 11:08:46	14.323	2.02	0.723	9.243
10-07-2005 11:09:47	14.748	2.25	0.815	8.883
10-07-2005 11:10:46	13.768	1.71	0.563	10.177
10-07-2005 11:11:47	12.931	1.50	0.495	11.550
10-07-2005 11:12:47	13.031	1.57	0.492	11.238
Run Averages	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 11:13:43	13.285	1.36	0.521	10.794
Operator:	Bill Johnston			
Plant Name:	Guadelupe Landfill			
Location:	Flare			
Test Run 2 End				

Final System Bias Check, Run 2 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 11:14:55	4.702	1.79	0.160	0.840
10-07-2005 11:15:54	0.105	0.93	0.106	-0.005
10-07-2005 11:16:55	-0.002	-0.03	0.106	-0.005
10-07-2005 11:17:54	0.712	9.51	8.287	9.965
10-07-2005 11:18:54	17.173	85.14	45.135	45.361
10-07-2005 11:19:55	19.164	84.56	45.266	45.638

Final System Bias Check for Run 2
Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare

	Reference Cylinder Numbers	
	Zero	Span
O2		CC8445
CO		CC211732
THC		AAL4576
NOx		SA18044

Date/Time 10-07-2005 11:20:40 PASSED

Analyte	O2	CO	THC	NOx
Units	%	ppm	ppm	ppm
Zero Ref Cyl	0.000	0.00	0.000	0.000
Zero Cal	0.000	0.00	0.000	0.000
Zero Avg	-0.018	-0.19	0.106	-0.005
Zero Bias%	0.1%	0.2%	0.2%	0.0%
Zero Drift%	0.2%	-0.3%	0.1%	0.0%
Span Ref Cyl	19.040	85.10	45.000	45.200
Span Cal	19.040	85.10	45.000	45.200
Span Avg	19.211	84.46	45.291	45.671
Span Bias%	0.7%	0.6%	0.6%	0.9%
Span Drift%	0.4%	-0.1%	-0.5%	1.7%
Ini Zero Avg	-0.055	0.07	0.077	-0.012
Ini Span Avg	19.116	84.51	45.539	44.809
Run Avg	13.285	1.36	0.521	10.794
Co	-0.036	-0.06	0.091	-0.008
Cm	19.164	84.49	45.415	45.240
Correct Avg	13.210	1.43	0.427	10.791

System Bias Check End

Test Run 3 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 11:21:41	15.286	16.98	7.162	14.331
Begin calculating run averages				
10-07-2005 11:22:40	13.192	0.68	0.548	10.999
10-07-2005 11:23:41	13.493	0.91	0.561	10.666
10-07-2005 11:24:42	13.067	0.92	0.498	11.378
10-07-2005 11:25:41	13.204	1.10	0.498	10.869
10-07-2005 11:26:41	13.237	1.13	0.498	10.974
10-07-2005 11:27:40	13.146	1.21	0.498	11.148
10-07-2005 11:28:41	13.155	1.19	0.500	10.954
10-07-2005 11:29:41	13.251	1.32	0.551	10.695
10-07-2005 11:30:40	13.157	1.30	0.542	11.028
10-07-2005 11:31:41	13.316	1.42	0.637	10.571
10-07-2005 11:32:42	14.202	1.80	0.948	9.202
10-07-2005 11:33:41	14.437	1.98	0.870	9.520
10-07-2005 11:34:41	13.627	1.53	0.700	10.195
10-07-2005 11:35:40	14.423	1.91	0.947	9.364
10-07-2005 11:36:41	14.544	1.97	1.067	8.663
10-07-2005 11:37:41	13.994	1.55	0.712	10.428
10-07-2005 11:38:40	13.854	1.63	0.773	9.928
10-07-2005 11:39:41	13.530	1.51	0.742	10.478
10-07-2005 11:40:42	13.462	1.61	0.773	10.734
10-07-2005 11:41:41	13.978	1.69	0.909	9.710
10-07-2005 11:42:41	13.771	1.70	0.881	9.783
10-07-2005 11:43:40	14.255	2.44	0.985	9.600
10-07-2005 11:44:41	14.276	2.07	1.000	9.335
10-07-2005 11:45:41	13.768	1.65	0.859	10.377
10-07-2005 11:46:40	13.842	1.73	1.039	9.833
10-07-2005 11:47:41	14.274	1.79	0.931	9.463
10-07-2005 11:48:42	15.060	2.73	1.239	8.127
10-07-2005 11:49:41	14.264	1.74	0.928	9.938
10-07-2005 11:50:41	13.175	1.38	0.760	11.113
10-07-2005 11:51:40	12.921	1.34	0.750	11.340
Run Averages	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 11:52:23	13.721	1.58	0.776	10.229

Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare
Test Run 3 End

Final System Bias Check, Run 3 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-07-2005 11:53:47	3.334	1.68	0.330	0.018
10-07-2005 11:54:47	0.170	0.52	0.312	-0.002
10-07-2005 11:55:48	0.009	-0.17	0.308	-0.002
10-07-2005 11:56:47	9.637	58.48	33.899	35.570
10-07-2005 11:57:47	18.887	84.71	45.231	45.650
10-07-2005 11:58:46	19.164	84.69	45.243	45.729

Final System Bias Check for Run 3

Operator: Bill Johnston
Plant Name: Guadelupe Landfill
Location: Flare

Reference Cylinder Numbers

	Zero	Span
O2		CC8445
CO		CC211732
THC		AAL4576
NOx		SA18044

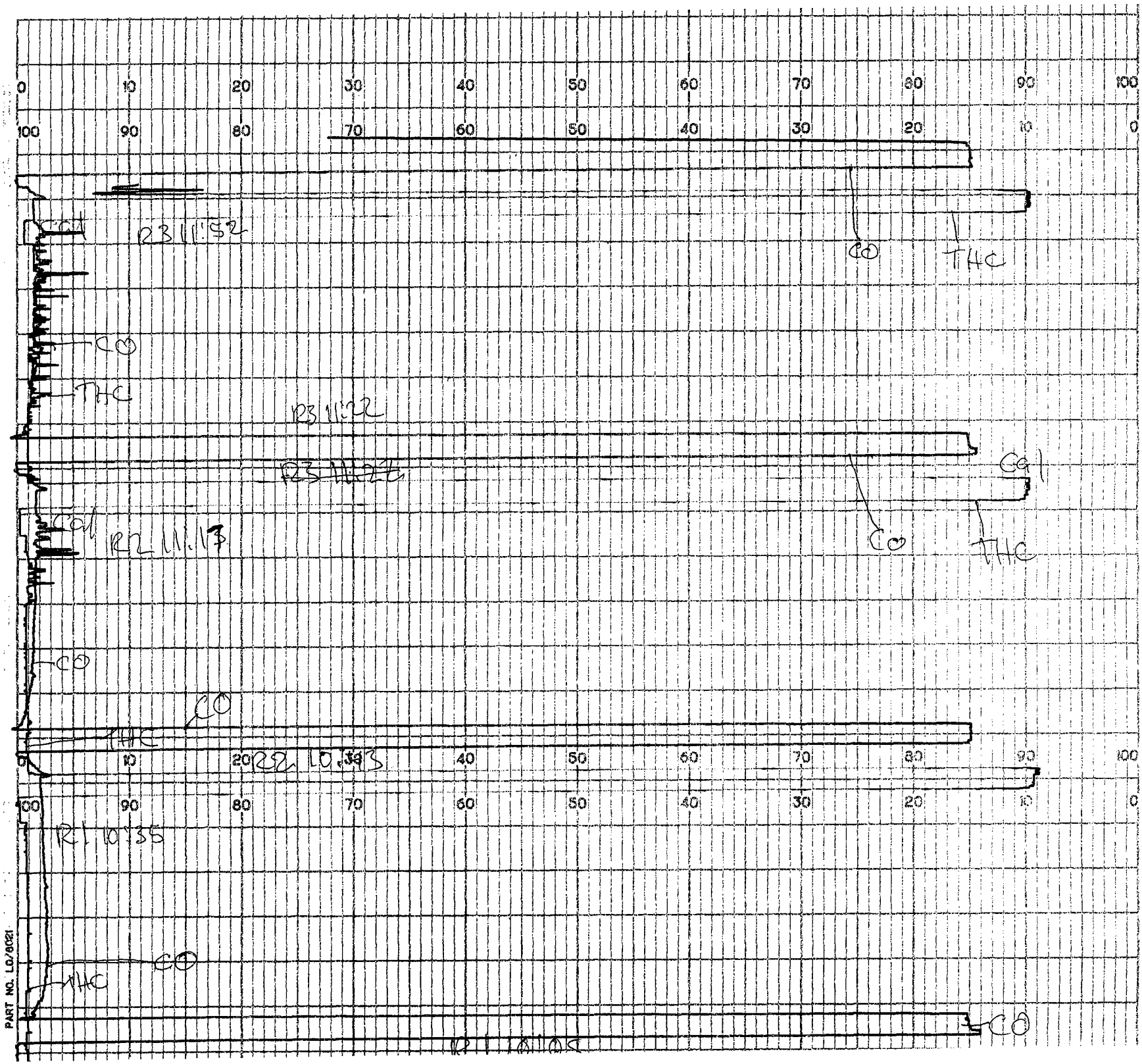
Date/Time 10-07-2005 11:58:59 PASSED

Analyte	O2	CO	THC	NOx
Units	%	ppm	ppm	ppm
Zero Ref Cyl	0.000	0.00	0.000	0.000
Zero Cal	0.000	0.00	0.000	0.000
Zero Avg	0.008	-0.16	0.310	-0.002
Zero Bias%	0.0%	0.2%	0.6%	0.0%
Zero Drift%	0.1%	0.0%	0.4%	0.0%
Span Ref Cyl	19.040	85.10	45.000	45.200
Span Cal	19.040	85.10	45.000	45.200
Span Avg	19.162	84.66	45.241	45.715
Span Bias%	0.5%	0.4%	0.5%	1.0%
Span Drift%	-0.2%	0.2%	-0.1%	0.1%
Ini Zero Avg	-0.018	-0.19	0.106	-0.005
Ini Span Avg	19.211	84.46	45.291	45.671
Run Avg	13.721	1.58	0.776	10.229
Co	-0.005	-0.18	0.208	-0.003
Cm	19.187	84.56	45.266	45.693
Correct Avg	13.618	1.76	0.567	10.121

System Bias Check End

Test Run 1 STRATA Version 1.1

	O2	CO	THC	NOx
	%	ppm	ppm	ppm
10-06-2005 14:07:51	0.118	0.20	0.052	0.072
10-06-2005 14:08:52	0.034	-0.23	-0.003	0.049
10-06-2005 14:09:51	7.059	45.30	28.053	28.641
10-06-2005 14:10:51	18.584	84.27	45.154	44.455
10-06-2005 14:11:52	19.004	84.69	45.239	45.362
10-06-2005 14:12:51	19.041	84.56	45.267	45.358
10-06-2005 14:13:51	18.633	78.64	34.281	38.598
Start Averaging				
10-06-2005 14:14:52	13.142	-0.23	0.308	14.707
10-06-2005 14:15:51	12.575	0.22	0.238	14.463
10-06-2005 14:16:52	12.540	0.47	0.208	14.330
10-06-2005 14:17:51	12.515	0.61	0.115	14.205
10-06-2005 14:18:51	12.629	0.71	0.063	14.071
10-06-2005 14:19:52	12.678	0.77	0.052	13.936
10-06-2005 14:20:51	12.800	0.81	0.054	13.620
10-06-2005 14:21:51	12.785	0.90	0.054	13.624
10-06-2005 14:22:52	12.735	0.90	0.053	13.663
10-06-2005 14:23:51	12.698	0.94	0.051	14.075
10-06-2005 14:24:52	12.416	0.93	-0.014	14.686
Average 400 samples	12.623	0.73	0.079	14.114
10-06-2005 14:25:51	12.388	0.95	-0.082	14.721
10-06-2005 14:26:52	13.687	32.98*	21.608	10.145
10-06-2005 14:27:51	14.306	48.30*	24.874	12.143
10-06-2005 14:28:51	13.386	1.80	3.833	11.412
10-06-2005 14:29:52	13.821	2.42	2.023	10.861
10-06-2005 14:30:51	13.300	1.28	1.260	12.242
10-06-2005 14:31:51	13.636	1.92	1.014	10.954
Start Averaging				
10-06-2005 14:32:52	13.414	1.59	0.636	11.894
10-06-2005 14:33:51	13.289	1.29	0.420	11.874
10-06-2005 14:34:52	13.465	1.42	0.274	11.213
10-06-2005 14:35:51	13.698	2.23	0.229	10.791
10-06-2005 14:36:51	13.778	12.43	0.146	11.135
10-06-2005 14:37:52	13.132	1.28	0.052	12.194
10-06-2005 14:38:51	13.587	1.48	0.078	10.757
10-06-2005 14:39:51	13.875	1.74	0.076	11.003
10-06-2005 14:40:52	13.409	1.40	0.052	11.686
10-06-2005 14:41:51	13.584	1.49	0.045	11.045
Average 380 samples	13.528	2.67	0.189	11.342



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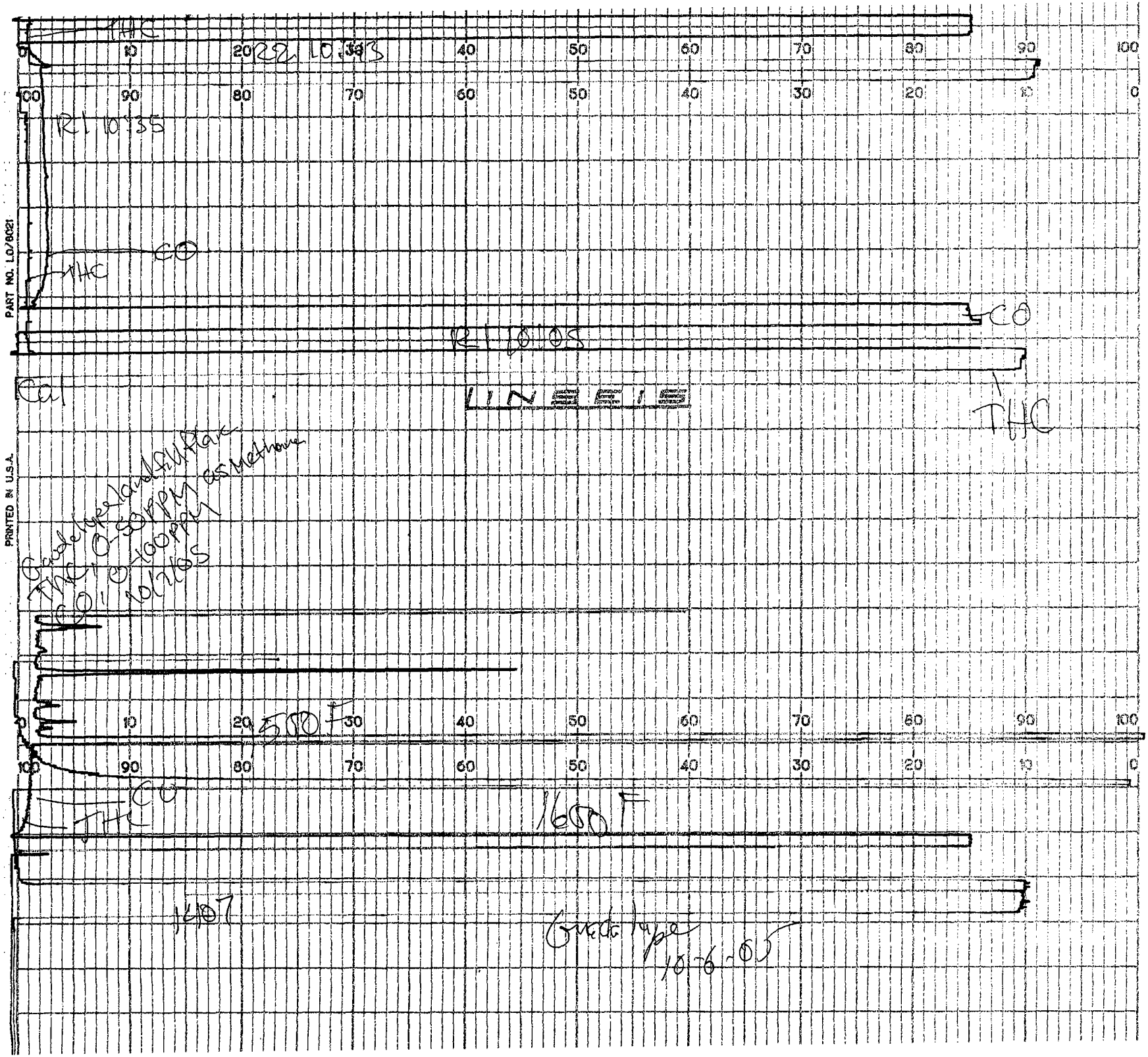

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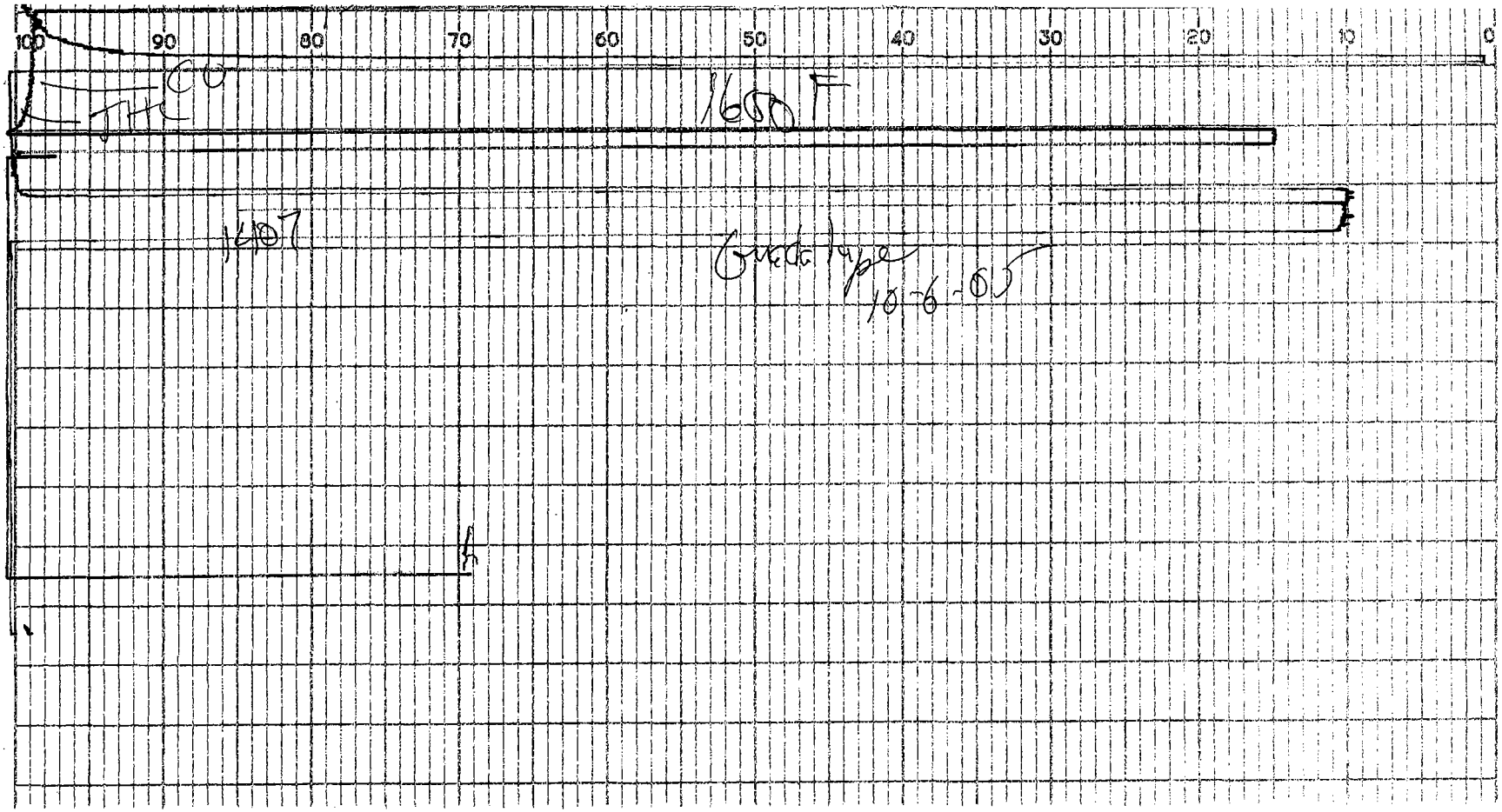
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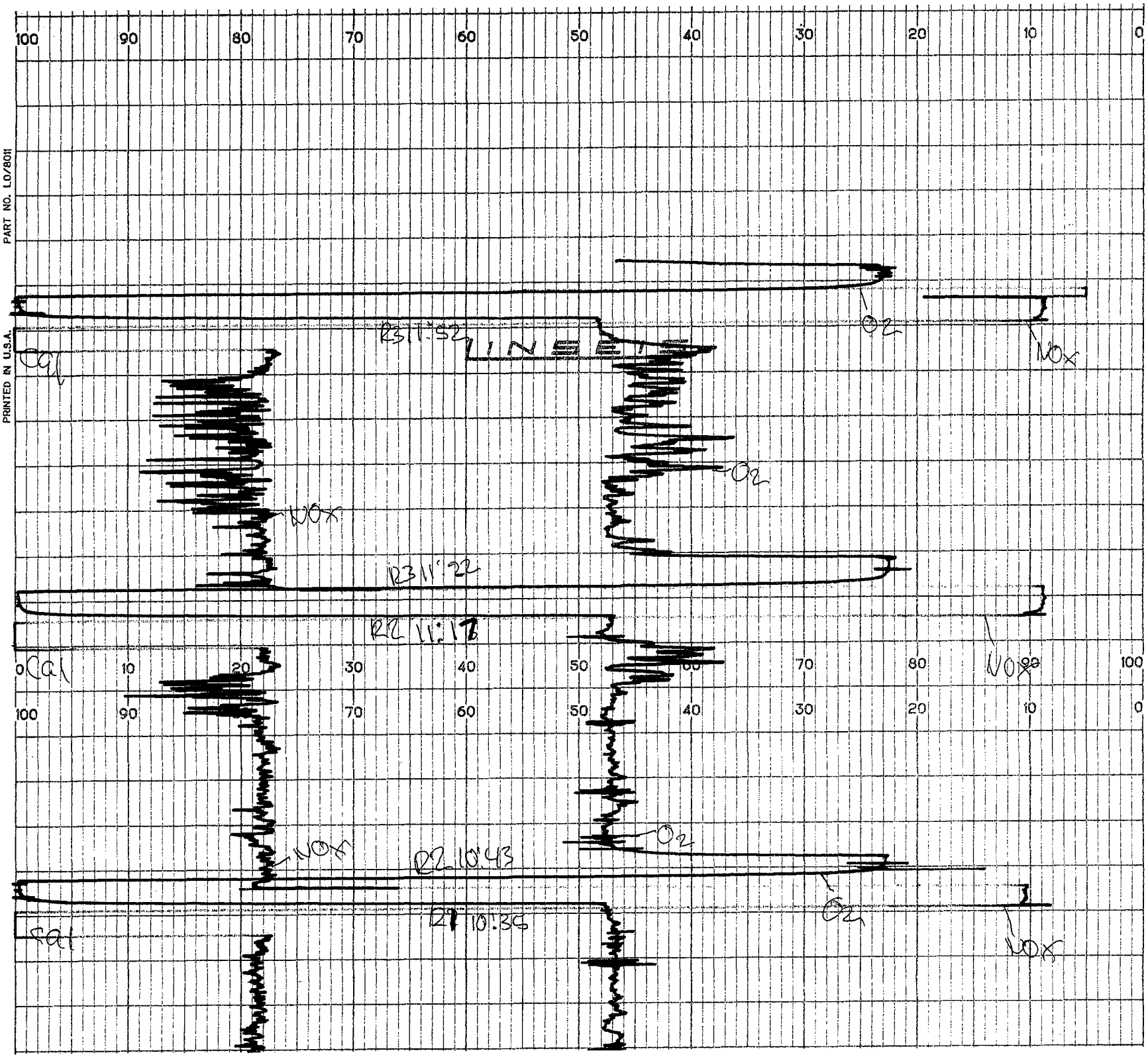
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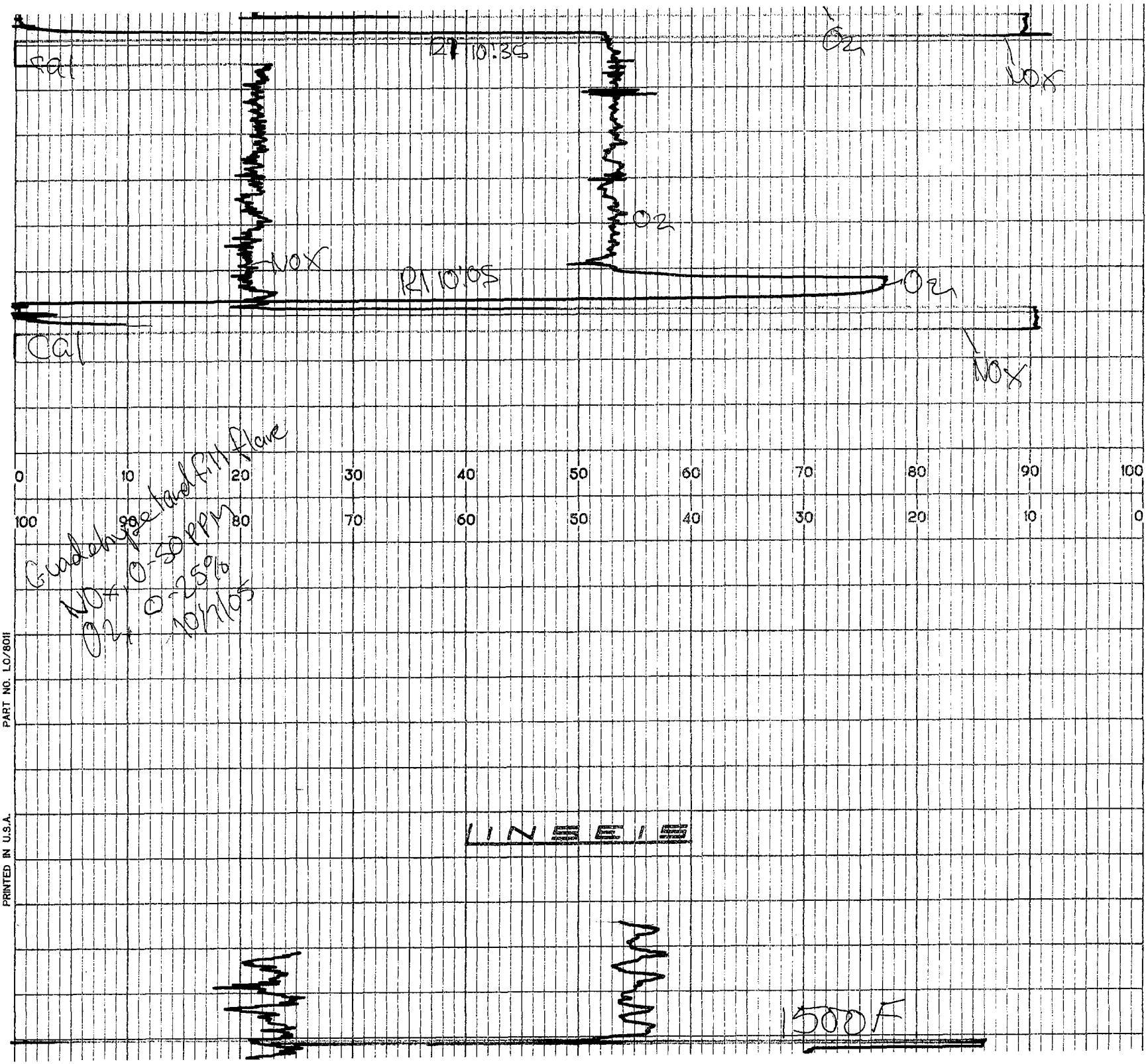

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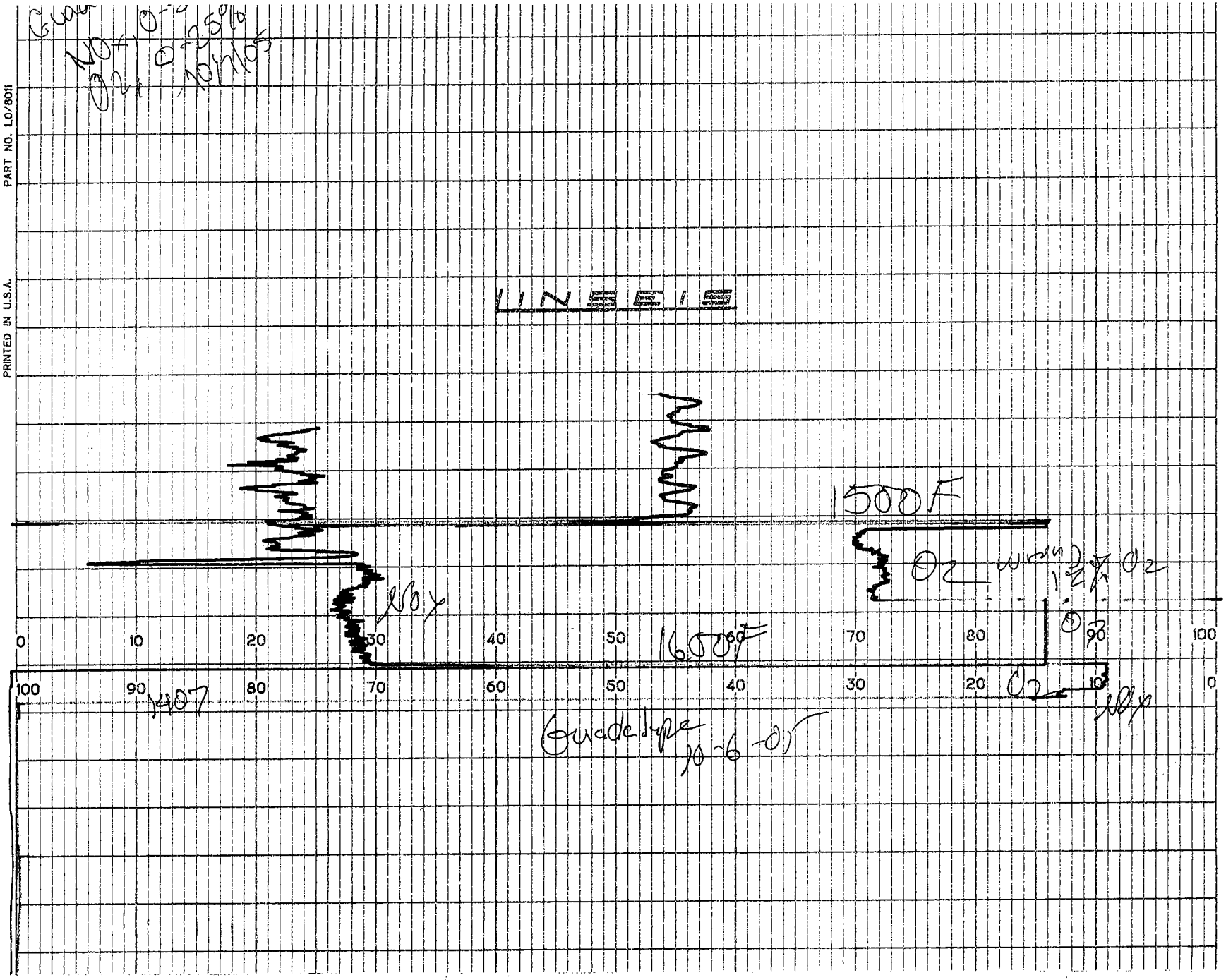
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Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER SHAW ENV. **P.O NUMBER**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
CARBON DIOXIDE GMIS	vs.SRM#2745	CC 102004	19.73 %
OXYGEN GMIS	vs.SRM#2659	CC 95713	21.04 %

ANALYZER READINGS

R=REFERENCE STANDARD *Z=ZERO GAS* *C=GAS CANDIDATE*

1. **COMPONENT** CARBON DIOXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Ultramat 5E S/N A12-730

ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 08/01/05

FIRST ANALYSIS DATE 08/08/05 **SECOND ANALYSIS DATE**

Z 0.00	R 19.74	C 17.82	CONC. 17.81	Z	R	C	CONC.
R 19.74	Z 0.00	C 17.80	CONC. 17.81	R	Z	C	CONC.
Z 0.00	C 17.80	R 19.74	CONC. 17.81	Z	C	R	CONC.
U/M %		MEAN TEST ASSAY 17.81		U/M %		MEAN TEST ASSAY	

2. **COMPONENT** OXYGEN GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Oxymat 5E S/N A12-839

ANALYTICAL PRINCIPLE Paramagnetic **LAST CALIBRATION DATE** 08/01/05

FIRST ANALYSIS DATE 08/08/05 **SECOND ANALYSIS DATE**

Z 0.00	R 21.04	C 19.04	CONC. 19.04	Z	R	C	CONC.
R 21.04	Z 0.00	C 19.04	CONC. 19.04	R	Z	C	CONC.
Z 0.00	C 19.04	R 21.04	CONC. 19.04	Z	C	R	CONC.
U/M %		MEAN TEST ASSAY 19.04		U/M %		MEAN TEST ASSAY	

VALUES NOT VALID BELOW 150 PSIG.

THIS CYLINDER NO. CC 8445
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. REV 9/97
PROCEDURE G1
CERTIFIED ACCURACY ± 1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 08/08/05
EXPIRATION DATE 08/08/08 **TERM** 36 MONTHS

CERTIFIED CONCENTRATION

CARBON DIOXIDE	17.81 %
OXYGEN	19.04 %
NITROGEN	BALANCE

ANALYZED BY ISMAEL RANGSIYAWONG ***CERTIFIED BY*** HELENA TRAN

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER SHAW ENVIRONMENTAL **P.O NUMBER**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE GMIS	1683b	SA 7757	49.7 ppm
CARBON MONOXIDE GMIS	VS.SRM#1678	CC 160092	51.1 ppm

ANALYZER READINGS

R=REFERENCE STANDARD ***Z=ZERO GAS*** ***C=GAS CANDIDATE***

1. COMPONENT NITRIC OXIDE GMIS **ANALYZER MAKE-MODEL-S/N** BECKMAN 951A S/N#0101354

ANALYTICAL PRINCIPLE CHEMILUMINESCENCE **LAST CALIBRATION DATE** 05/01/05

FIRST ANALYSIS DATE 05/02/05 **SECOND ANALYSIS DATE** 05/09/05

Z 0.0	R 420.5	C 370.6	CONC. 43.8		Z 0.0	R 402.9	C 353.3	CONC. 43.6			
R 420.2	Z 0.0	C 369.7	CONC. 43.7		R 400.4	Z 0.0	C 350.9	CONC. 43.6			
Z 0.0	C 368.6	R 420.3	CONC. 43.6		Z 0.0	C 351.3	R 400.8	CONC. 43.6			
U/M mV		MEAN TEST ASSAY 43.7			U/M mV			MEAN TEST ASSAY 43.6			

2. COMPONENT CARBON MONOXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Ultramat 5E S/N A12-729

ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 04/23/05

FIRST ANALYSIS DATE 05/02/05 **SECOND ANALYSIS DATE** 05/09/05

Z 0.0	R 51.1	C 44.2	CONC. 44.2		Z 0.0	R 51.1	C 44.2	CONC. 44.2			
R 51.1	Z 0.0	C 44.2	CONC. 44.2		R 51.1	Z 0.0	C 44.4	CONC. 44.4			
Z 0.0	C 44.3	R 51.2	CONC. 44.2		Z 0.0	C 44.3	R 51.1	CONC. 44.3			
U/M ppm		MEAN TEST ASSAY 44.2			U/M ppm			MEAN TEST ASSAY 44.3			

VALUES NOT VALID BELOW 150 PSIG
NOX VALUE FOR REFERENCE ONLY.

THIS CYLINDER NO. SA 18044
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. REV 9/97
PROCEDURE G1
CERTIFIED ACCURACY ±1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 05/09/05
EXPIRATION DATE 05/09/07 **TERM** 24 MONTHS

CERTIFIED CONCENTRATION

NITRIC OXIDE	43.6 ppm
CARBON MONOXIDE	44.2 ppm
NITROGEN	BALANCE
NOx	45.2 ppm

ANALYZED BY MICHAEL TSANG ***CERTIFIED BY*** CHRIS VU

CERTIFIED MASTER CLASS

Single-Certified Calibration Standard

Scott Specialty Gases
500 WEAVER PARK RD,LONGMONT,CO 80501 Phone: 888-253-1635 Fax: 303-772-7673

CERTIFICATE OF ACCURACY: Certified Master Class Calibration Standard

Product Information
Project No.: 08-24834-001
Item No.: 08022711 PAL
P.O. No.: SUSAN M. POWERS

Cylinder Number: AAL4576
Cylinder Size: AL
Certification Date: 25May2005
Expiration Date: 25May2008

Customer

SHAW ENVIRONMENTAL & INFRASTRUCTURE
2360 BERING DRIVE
SAN JOSE, CA 95131

CERTIFIED CONCENTRATION

Component Name	Concentration (Moles)		Accuracy (+/-%)
METHANE	45.0	PPM	2
AIR		BALANCE	

TRACEABILITY

Traceable To

NIST

APPROVED BY: JON WITZAK

DATE: 5-25-05

SPECIFICATIONS

Component Name	Requested Concentration (Moles)		Certified Concentration (Moles)		Blend Tolerance Result (+/- %)	Certified Accuracy Result (+/- %)
METHANE	45.	PPM	45.0	PPM	.0	2.00
AIR		BAL		BAL		

TRACEABILITY

Traceable To
NIST

PHYSICAL PROPERTIES

Cylinder Size: AL

Pressure: 1924 PSIG
Expiration Date: 25May2008

Valve Connection: 590

SPECIAL HANDLING INSTRUCTIONS

Do not use or store cylinder at or below the stated dew point temperature. Possible condensation of heavier components could result. In the event the cylinder has been exposed to temperatures at or below the dew point, place cylinder in heated area for 24 hours and then roll cylinder for 15 minutes to re-mix.

Use of calibration standards at or below dew point temperature may result in calibration error.

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER SHAW ENVIR. **P.O NUMBER** 0

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE GMIS	vsSRM#1687b	SA 15262	992 ppm
CARBON MONOXIDE GMIS	vs.SRM#1679	CC 159872	101.4 ppm

ANALYZER READINGS

R=REFERENCE STANDARD *Z=ZERO GAS* *C=GAS CANDIDATE*

1. **COMPONENT** NITRIC OXIDE GMIS **ANALYZER MAKE-MODEL-S/N** BECKMAN 951A S/N#0101354
   ANALYTICAL PRINCIPLE CHEMILUMINESCENCE **LAST CALIBRATION DATE** 05/02/05
   FIRST ANALYSIS DATE 04/25/05 **SECOND ANALYSIS DATE** 05/02/05

Z 0.0	R 882.5	C 769.7	CONC. 865.2		Z 0.0	R 832.8	C 728.8	CONC. 868.1	
R 881.7	Z 0.0	C 769.2	CONC. 865.4		R 840.0	Z 0.0	C 732.9	CONC. 865.5	
Z 0.0	C 769.7	R 881.5	CONC. 866.2		Z 0.0	C 733.4	R 841.0	CONC. 865.1	
U/M mV		MEAN TEST ASSAY	865.6		U/M mV		MEAN TEST ASSAY	866.2	

2. **COMPONENT** CARBON MONOXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Ultramat 5E S/N A12-729
   ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 04/08/05
   FIRST ANALYSIS DATE 04/25/05 **SECOND ANALYSIS DATE** 05/02/05

Z 0.0	R 101.4	C 85.0	CONC. 85.0		Z 0.0	R 101.4	C 85.2	CONC. 85.2	
R 101.4	Z 0.0	C 85.0	CONC. 85.0		R 101.4	Z 0.0	C 85.1	CONC. 85.1	
Z 0.0	C 85.0	R 101.3	CONC. 85.1		Z 0.0	C 85.2	R 101.4	CONC. 85.2	
U/M ppm		MEAN TEST ASSAY	85.0		U/M ppm		MEAN TEST ASSAY	85.2	

VALUES NOT VALID BELOW 150 PSIG. NOx VALUE FOR REFERENCE ONLY.

THIS CYLINDER NO. CC 211732
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. REV 9/97
PROCEDURE G1
CERTIFIED ACCURACY ± 1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 05/02/05
EXPIRATION DATE 05/02/07 **TERM** 24 MONTHS

CERTIFIED CONCENTRATION

NITRIC OXIDE	866 ppm
CARBON MONOXIDE	85.1 ppm
NITROGEN	BALANCE
NOx	871 ppm

ANALYZED BY MICHAEL TSANG ***CERTIFIED BY*** CHRIS VU

Appendix H
Analytical Results

Atmospheric Analysis & Consulting, Inc.

Atmospheric Analysis & Consulting, Inc.

CLIENT : Shaw Environmental, Inc.
PROJECT NAME : Guadalupe Landfill
AAC PROJECT NO. : 050509
REPORT DATE : 10/24/2005

On October 10, 2005, Atmospheric Analysis & Consulting, Inc. received three (3) Tedlar bags for Volatile Organic Compounds analysis by EPA Method 25C, Sulfur Analysis by ASTM D-5504 and D-1945 Analysis, which include C1-C6+ analysis by EPA method 18, and fixed gas analysis by EPA 3C. Upon receipt the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab No.
Run 1	050509-12892
Run 2	050509-12893
Run 3	050509-12894

EPA 25C Analysis - Up to a 1 ml aliquot of gaseous sample is injected into the GC/FID for analysis following EPA25C as specified in the SOW.

ASTM D-5504 – Up to a 1ml aliquot of sample is injected into the GC/SCD for analysis following ASTM D-5504 as specified in the SOW.

EPA 18 Analysis - Up to a 1 ml aliquot of samples is injected into the GC/FID for analysis following EPA 18 as specified in the SOW.

EPA 3C Analysis - Up to a 1 ml aliquot of samples is injected into the GC/TCD for analysis following EPA 3C as specified in the SOW.

No problems were encountered during receiving, preparation and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-EPA 25C, ASTM D-5504, EPA 18 and EPA 3C.

I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. Release of the data contained in this hardcopy data package and its electronic data deliverable submitted on diskette has been authorized by the Laboratory Director or his designee, as verified by the following signature.

If you have any question or require further explanation of data results, please contact the undersigned.

Sucha S. Parmar, PhD
Technical Director

This report consists of 11 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : Shaw Environmental, Inc.
PROJECT NO. : 050509
UNITS : PPMV

SAMPLING DATE : 10/07/2005
RECEIVING DATE : 10/10/2005
ANALYSIS DATE : 10/10/2005
REPORT DATE : 10/24/2005

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

	Client ID.	Run 1	Run 2	Run 3	MDL
Compounds	AAC ID	050509-12892	050509-12893	050509-12894	
Analysis Dilution Factor		5.0	10	10	
Can Dilution Factor		1	1	1	
H_2S		62	48	64	0.05
Carbonyl Sulfide		<PQL	<PQL	<PQL	0.05
SO2		<PQL	<PQL	<PQL	0.05
Methyl Mercaptan		0.9	<PQL	<PQL	0.05
Ethyl Mercaptan		<PQL	<PQL	<PQL	0.05
Dimethyl Sulfide		1.8	1.7	2.0	0.05
n-Butyl mercaptan		<PQL	<PQL	<PQL	0.05
Carbon Disulfide		<PQL	<PQL	0.6	0.05
Allyl Sulfide		<PQL	<PQL	<PQL	0.05
Propyl Sulfide		<PQL	<PQL	<PQL	0.05
Allyl disulfide		<PQL	<PQL	<PQL	0.05
Isopropyl Mercaptan		<PQL	<PQL	<PQL	0.05
t-Butyl mercaptan		<PQL	<PQL	<PQL	0.05
Propyl Mercaptan		<PQL	<PQL	<PQL	0.05
Butyl Sulfide		<PQL	<PQL	<PQL	0.05
Ethyl methyl sulfide		<PQL	<PQL	<PQL	0.05
Thiophene		<PQL	<PQL	<PQL	0.05
Isobutyl mercaptan		<PQL	<PQL	<PQL	0.05
Dimethyl disulfide		<PQL	<PQL	<PQL	0.05
Allyl mercaptan		<PQL	<PQL	<PQL	0.05
3-Methylthiophene		<PQL	<PQL	<PQL	0.05
Tetrahydrothiophene		<PQL	<PQL	<PQL	0.05
Diethyl sulfide		<PQL	<PQL	<PQL	0.05
2-Ethylthiophene		<PQL	<PQL	<PQL	0.05
2,5-Dimethylthiophene		<PQL	<PQL	<PQL	0.05
Diethyl disulfide		<PQL	<PQL	<PQL	0.05
Total Unidentified Sulfurs as H_2S		<PQL	<PQL	<PQL	0.05
Total Reduced Sulfurs		65	50	66	0.05

PQL = Practical Quantitation Limit (MDL x Analysis Dilution factor)
All compounds concentrations expressed in terms of H_2S.

Dr. Sucha Parmar
Technical Director

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT : **Shaw Environmental, Inc.**
PROJECT NO. : **050509**
MATRIX : GAS

SAMPLING DATE: **: 10/07/2005**
RECEIVING DATE: **: 10/10/2005**
ANALYSIS DATE: **: 10/10-11/2005**
REPORT DATE: **: 10/31/2005**

	Client ID:	Run 2	Detection Limits
	AAC ID:	050509-12893	
Compounds, Units			
H_2S, ppmv		48	0.05ppmv
Carbonyl Sulfide, ppmv		ND	0.05ppmv
Methyl Mercaptan, ppmv		ND	0.05ppmv
Ethyl Mercaptan, ppmv		ND	0.05ppmv
Propyl Mercaptan, ppmv		ND	0.05ppmv
Carbon Disulfide, ppmv		ND	0.05ppmv
Dimethyl sulfide, ppmv		1.7	0.05ppmv
Allyl Sulfide, ppmv		ND	0.05ppmv
Propyl Sulfide, ppmv		ND	0.05ppmv
Allyl Disulfide, ppmv		ND	0.05ppmv
Butyl Sulfide, ppmv		ND	0.05ppmv
Ethyl Methyl Sulfide, ppmv		ND	0.05ppmv
Thiophene, ppmv		ND	0.05ppmv
Dimethyl Disulfide, ppmv		ND	0.05ppmv
Butyl Mercaptan, ppmv		ND	0.05ppmv
Allyl mercaptan, ppmv		ND	0.05ppmv
C1 hydrocarbons, ppmv		460816	0.3 ppmv
C2 hydrocarbons, ppmv		ND	0.3 ppmv
C3 hydrocarbons, ppmv		22	0.3 ppmv
C4 hydrocarbons, ppmv		10	0.3 ppmv
C5 hydrocarbons, ppmv		22	0.3 ppmv
C6 hydrocarbons, ppmv		20	0.3 ppmv
C6 + hydrocarbons, ppmv		105	0.3 ppmv
CO_2, %		35	0.1 %
CO, %		ND	0.1 %
O_2, %		2.8	0.1 %
N_2, %		16	0.1 %
H_2, %		ND	0.1 %
F Factor(dscf Exhaust/MM Btu)		**9297**	
Total Wt.% Adjusted Sp. Gravity		**1.0**	
FUEL GAS BTU per LBM		**11008**	
FUEL GAS BTU per CU. FT		**468**	

Dr. Sucha Parmar
Technical Director

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT:	**: Shaw Environmental, Inc.**	**Sampling Date**	**: 10/07/2005**
PROJECT NO.	**: 050509**	**Receiving Date**	**: 10/10/2005**
MATRIX	**: AIR**	**Analysis Date**	**: 10/10/2005**
UNITS	**: PPMV**	**Report Date**	**: 10/24/2005**

Client ID	AAC ID	*ANALYSIS METHOD*		*EPA Method 18*				
		Detection Limit		*0.3 ppmv*				
		C1*	C2	C3	C4	C5	C6	C6+
Run 2	050509-12893	*	ND	22	10	22	20	105

*** C1 values form EPA 3C**

Dr. Sucha Parmar
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

Client	**: Shaw Environmental, Inc.**	**Sampling Date**	**: 10/07/2005**
Project No.	**: 050509**	**Receiving Date**	**: 10/10/2005**
Matrix	**: air**	**Analysis Date**	**: 10/10/2005**
Units	**: ppmv**	**Report Date**	**: 10/24/2005**

EPA Method 25C

Detection Limit:		0.3 ppmv
Client Sample ID	**AAC ID**	**NMHC****
Run 2	**050509-12893**	**3476**

****Non-Methane Hydrocarbons as methane**

Dr. Sucha Parmar
Technical Director

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

Client:	**: Shaw Environmental, Inc.**	**Sampling Date**	**: 10/07/2005**
Project No.	**: 050509**	**Receiving Date**	**: 10/10/2005**
Matrix	**: air**	**Analysis Date**	**: 10/11/2005**
Units	**: %**	**Report Date**	**: 10/24/2005**

EPA Method 3C

Detection Limit: 0.1 %		Analyte					
Client ID	**AAC ID**	**Hydrogen**	**Oxygen**	**Nitrogen**	**CO**	**Methane**	**CO2**
RUN 2	050509-12893	ND	2.8	16	ND	46	35

Dr. Sucha Parmar
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

DATE ANALYZED : **10/10/2005** **UNITS** : **ppmv**

I - Duplicate Analysis ASTM D-5504 - 050509-12892 (5X)

Analyte	Sample Conc	Duplicate Conc	% RPD
H2S	63	61	**3.5**

II - Method Blank

AAC ID	Analyte	Units	MB Conc.
Method Blank	**H2S**	ppmv	ND

III-LCS - ASTM D-5504

Analyte	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
H2S	10	9.0	8.7	90	87	**3.2**

* Must be 70-130%

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed : 10/11/2005

I-Method Blank - EPA 3C

	Analyte	Units	Sample Analysis
Method Blank	Hydrogen	%	ND
	Oxygen	%	ND
	Nitrogen	%	ND
	CO	%	ND
	Methane	%	ND
	CO2	%	ND

II-LCS - EPA 3C

	Analyte	Spike Conc.	LCS Conc.	LCS Dup Conc.	% Rec	% RPD
LCS	Hydrogen	20	24	22	117	8.8
	Nitrogen	20	25	32	141	23
	CO	20	21	24	113	14
	Methane	20	22	22	109	0.6
	CO2	20	22	21	106	2.9

III-Duplicate Analysis -EPA 3C

AAC ID	Analyte	Sample Analysis	Duplicate Analysis	Mean	% RPD
050509-12893	Hydrogen	0.0	0.0	0.00	0.0
	Oxygen	2.5	3.4	2.9	16
	Nitrogen	16	18	17	8.1
	CO	0.0	0.0	0.0	0.0
	Methane	50	47	49	3.9
	CO2	37	35	36	3.0

IV-Matrix Spike Analysis -EPA 3C

AAC ID	Analyte	Sample Conc.	Spike Added	Sample Spike Conc.	Sample Spike Dupl. Conc.	Spike % Rec. *	Spike Dupl % Rec. *	% RPD **
050509-12893	Hydrogen	0.0	10	9.8	10	98	104	5.2
	Nitrogen	8.5	10	20	19	111	104	5.8
	CO	0.0	10	9.8	10	98	100	1.3
	Methane	24	10	35	35	103	107	3.7
	CO2	18	10	28	28	101	102	1.7

* Must be 70-130%

** Must be $\leq$ 25%

Dr. Sucha Parmar
Technical Director

Quality Control/Quality Assurance Report

Date Analyzed : 10/10/2005

I-Method Blank EPA Method 25.3

Analyte	Units	Sample Analysis
NMHC	ppm	ND

II-LCS

Analyte	True Conc.	LCS Conc.	LCS Conc. Dup	% Rec. *	% RPD **
NMHC	100	102	102	102	0.6

* Must be 70-130%

** Must be $\leq$ 25%

Dr. Sucha Parmar,
Technical Director

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed : 10/10/2005

I - Method Blank

AAC ID	Analyte	Units	MB Conc.
Method Blank	C1	ppmv	ND
	C2	ppmv	ND
	C3	ppmv	ND
	C4	ppmv	ND
	C5	ppmv	ND
	C6	ppmv	ND

II - LCS

AAC ID	Analyte	Theoretical Conc.	LCS Conc.	LCS Conc. Dup	% Rec	% RPD
Lab Control Standard	Methane	100	99	93	96	5.6
	Ethane	101	96	93	94	3.2
	Propane	100	97	94	96	3.1
	Butane	100	95	94	95	1.6
	Pentane	100	94	92	93	1.4
	Hexane	98	91	90	92	1.1

III - Duplicate Analysis

AAC ID	Analyte	Units	Sample Conc.	Duplicate Conc.	Mean	%RPD
050480-12623	Methane	ppmv	0.9	0.9	0.9	5.6

IV-Spiked Sample

AAC ID	Analyte	Units	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
050480-12623	Methane	ppmv	0.4	50	51	48	101	95	5.2

* Must be 70-130%

** Must be ≤ 25%

Dr. Sucha Parmar
Technical Director

Laboratory Analysis Report

CLIENT	**: Shaw Environmental, Inc.**	SAMPLING DATE:	**: 10/07/2005**
PROJECT NO.	**: 050509**	RECEIVING DATE:	**: 10/10/2005**
MATRIX	: GAS	ANALYSIS DATE:	**: 10/10-11/2005**
		REPORT DATE:	**: 10/31/2005**

Client ID:	Run 2	Detection Limits
AAC ID:	050509-12893	
Compounds, Units		
H_2S, ppmv	48	0.05ppmv
Carbonyl Sulfide, ppmv	ND	0.05ppmv
Methyl Mercaptan, ppmv	ND	0.05ppmv
Ethyl Mercaptan, ppmv	ND	0.05ppmv
Propyl Mercaptan, ppmv	ND	0.05ppmv
Carbon Disulfide, ppmv	ND	0.05ppmv
Dimethyl sulfide, ppmv	1.7	0.05ppmv
Allyl Sulfide, ppmv	ND	0.05ppmv
Propyl Sulfide, ppmv	ND	0.05ppmv
Allyl Disulfide, ppmv	ND	0.05ppmv
Butyl Sulfide, ppmv	ND	0.05ppmv
Ethyl Methyl Sulfide, ppmv	ND	0.05ppmv
Thiophene, ppmv	ND	0.05ppmv
Dimethyl Disulfide, ppmv	ND	0.05ppmv
Butyl Mercaptan, ppmv	ND	0.05ppmv
Allyl mercaptan, ppmv	ND	0.05ppmv
C1 hydrocarbons, ppmv	460816	0.3 ppmv
C2 hydrocarbons, ppmv	ND	0.3 ppmv
C3 hydrocarbons, ppmv	22	0.3 ppmv
C4 hydrocarbons, ppmv	10	0.3 ppmv
C5 hydrocarbons, ppmv	22	0.3 ppmv
C6 hydrocarbons, ppmv	20	0.3 ppmv
C6 + hydrocarbons, ppmv	105	0.3 ppmv
CO_2, %	35	0.1 %
CO, %	ND	0.1 %
O_2, %	2.8	0.1 %
N_2, %	16	0.1 %
H_2, %	ND	0.1 %
F Factor(dscf Exhaust/MM Btu)	**9297**	
Total Wt.% Adjusted Sp. Gravity	**1.0**	
FUEL GAS BTU per LBM	**11008**	
FUEL GAS BTU per CU. FT	**468**	

Dr. Sucha Parmar
Technical Director

Laboratory

Shaw Environmental Chain Of Custody Record

CLIENT: Guadalupe Landfill

Project Number: 050509

DATE: 10-7-05

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	
Shaw Environmental, Inc.			

ADDRESS:	EDF DELIVERABLE TO (Responsible Party or Designee):	PHONE NO.:	E-MAIL:	CONSULTANT PROJECT NO.:
2360 Bering San Jose, CA 95131				

PROJECT CONTACT (Hardcopy or PDF Report to): ~~Bill Johnston~~ Scott Borchers

SAMPLER NAME(S) (Print):

TELEPHONE:	FAX:	E-MAIL:
408.382.5800	408.433.1912	

TURNAROUND TIME (BUSINESS DAYS):

☒ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES:

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Compliance Landfill Gas	D1945-81, 3588-89, GPA 2145-94		Sulfur Species, TRS		EPA M25-C, Nmocvs Methane	(Run 2 only)							FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	Run 1	10-7		Bag	1				X		X								Landfill gas 12892
	Run 2	10-7		Bag	1	X			X		X								Landfill gas 12893
	Run 3	10-7		Bag	1				X		X								Landfill gas 12894

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Scott Borchers		10/10/05	0830
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

03/06/03 Revision