HORIZON

AIR MEASUREMENT SERVICES, INC.

Horizon Test #: B06-015-FR
Date Tested: June 1, 2007
Report Date: October 25, 2007
Revision Number: 0

EMISSION COMPLIANCE TEST ON A LANDFILL GAS FLARE AFTER LOUVER ALTERATION

Flare #8

Sunshine Canyon Landfill

Permit to Operate No. F86506
Facility ID No.: 049111

Prepared for:

BFI of California
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, California 91342

Prepared by:

Horizon Air Measurement Services, Inc.
996 Lawrence Drive, Suite 108
Newbury Park, California 91320

Regulatory Agency

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 91765

Edward S. Swede
Project Manager

Richard J. Vacherot
Technical Director

HORIZON
AIR MEASUREMENT SERVICES, INC.

October 25, 2007

Ms. Susan Jennings
Sunshine Canyon Landfill
14747 San Fernando Road
Sylmar, California 91342

Dear Ms. Jennings:

Please find enclosed two copies of the final report entitled "Emission Compliance Test on a Landfill Gas Flare After Louver Alteration" for submittal to SCAQMD.

If you have any questions, please call me at (805) 498-8781.

Sincerely,

HORIZON AIR MEASUREMENT SERVICES, INC.

Richard J. Vacherot
Technical Director

996 LAWRENCE DR., SUITE 108, NEWBURY PARK, CALIFORNIA 91320 • (805) 498-8781 • FAX (805) 498-3173

CERTIFICATE OF NO CONFLICT OF INTEREST

I certify that I am responsible for the testing operations of Horizon Air Measurement Services, Inc. (Horizon) and am authorized to sign this certificate on Horizon's behalf.

Horizon may conduct tests as an independent contractor of the California Air Resources Board pursuant to Section 91200-91220 of Title 17, of the California Code of Regulations and SCAQMD Rule 304(L). I further certify that Horizon only utilizes personnel to participate in such tests where such testing and participation would not be prohibited by Section 91208, "Conflict of Interest", Title 17, California Code of Regulations.

Signature: _____

Name: Richard J. Vacherot

Title: Technical Director

Date: 6-29-07

TABLE OF CONTENTS

1. INTRODUCTION

Under Permit to Operate (PTO) F86506 or per the approved 1150.1 compliance plan which states, "at least one flare every year and then alternate all others such that each is source tested at least once every three years", BFI of California (BFI) is required to conduct an annual source test on the subject landfill gas flare (Flare #8) located at the Sunshine Canyon Landfill in Sylmar, California. Horizon Air Measurement Services, Inc. (Horizon) had been retained for this purpose. The last scheduled test was August 2005 for Flare #8. The next scheduled routine source test will be conducted in August 2008.

The test program is in response to BFI requesting to an Alteration/Modification permit to the Flare. The Alteration/Modification to the existing flare stack is an increase in size of the louvers, allowing additional combustion air to enter the stack. This increased airflow to the flare will allow the flare to operate within the existing permit parameters, maximum gas flow to the flare of 4,167 scfm or 105 million BTU/hr, whichever is reached first.

The test program was completed on June 1, 2007 by Horizon in accordance with the SCAQMD-approved Test Plan (Horizon # B06-015-TP). The test was not observed by SCAQMD, even though SCAQMD had been notified seven days in advance. The test matrix is shown in Table 1-1.

The results of the testing program, with respect to PTO limits, are summarized in Section 2, Summary of Results. A brief description of the flare and flare operating conditions during testing is provided in Section 3. Section 4 provides a detailed description of the sampling/analytical techniques utilized. Section 5 provides a more detailed results summary/discussion.

Table 1-1
Compounds of Interest
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007

Parameter	Location	Method	Number of Samples Per Flare
Total Non-Methane Hydrocarbons (TNMHC)	Inlet	ASTM D3588/D1945	2
	Outlet	SCAQMD Method 25.3	2
Reduced Sulfur Compounds (C_1-C_3) Including H_2S	Inlet	SCAQMD Method 307.91 (equivalent)	1
Speciated Organic Compounds	Inlet	EPA TO-15	1
	Outlet	EPA TO-15	3
Particulate Matter	Outlet	SCAQMD Method 5.1	1
Oxides of Nitrogen	Outlet	SCAQMD Method 100.1	1
Oxides of Sulfur	Outlet	Calculated based on inlet reduced sulfur compounds	1
Carbon Monoxide	Outlet	SCAQMD Method 100.1	1
	Inlet	ASTM D 3588	1
Oxygen	Outlet	SCAQMD Method 100.1	1
	Inlet	ASTM D 3588	1
Carbon Dioxide	Inlet	ASTM D 3588	1
	Outlet	SCAQMD Method 100.1	1
Methane	Inlet	ASTM D 3588	1
	Outlet	SCAQMD Method 25.3	1
Flow Rate/Temperature	Inlet	SCAQMD Method 2.1	1
	Outlet	Calculated Stoichiometrically	1
Moisture	Outlet	SCAQMD Method 5.1	1
	Inlet	SCAQMD Method 4.1	1
BTU Content	Inlet	ASTM D3588	1

2. SUMMARY OF RESULTS

The results of the testing program are provided in Table 2-1. All flare emission rates are based upon the measured exhaust flow rate. Carbon monoxide concentrations were below the quantifiable limit of 20 ppm and is reported as such.

A more detailed summary of results is provided in Section 5.

Table 2-1
Summary of Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007

Parameter	Emission Rate	Allowable Emissions
Inlet Gas Flow Rate	2,796 dscfm	4,167 dscfm
Oxides of Nitrogen	2.07 lb/hr	6.3 lb/hr
Total Particulate Matter (PM_{10})	0.48 lb/hr	0.64 lb/hr
Carbon Monoxide	<1.92 lb/hr	3.7 lb/hr
Reactive Organic Gases, as CH_4	0.135 lb/hr	0.63 lb/hr
	0.886 ppm (C_6) @ 3% O_2	20 ppm (C_6) @ 3% O_2 (Rule 1150.1)
	99.8% DRE	98% DRE
Oxides of Sulfur, as SO_2	1.75 lb/hr	3.8 lb/hr
Heat Output	88.1 MMBtu/hr	105 MMBtu/hr

3. FLARE DESCRIPTION AND OPERATION

3.1 Flare Description

The landfill gas flare is a Flare Industries equivalent to a McGill model No. EFG-125: consisting of an insulated steel cylinder 50 feet high and approximately 13 feet in diameter. Operating flow rate is limited (by permit conditions) to either 4167 scfm or 105 million BTU/hr, which ever is reached first. The flow rate, continuously monitored during the testing on BFI's permanent strip chart recorder, averaged 2,352 scfm. (Appendix E).

The flare is equipped with a multi-jet burner, propane gas pilot system with electric ignitor system, UV flame sensor (s), automatic shutdown and alarm system, automatic combustion air regulating system (louvers) and temperature controller.

The flare operating temperature range is 1,600°F to 2,000°F. Flare operating temperature during the test was set within this range. Flare temperature was continuously monitored by the facility over the duration of the testing period (Appendix E).

3.2 Flare Operation

Landfill gas to the flare is supplied by operating one or two blowers: Lampson, Model 362-2D, each 45 H.P., one blower for standby, venting the landfill gas collection system. The blowers supply a vacuum to the landfill gas collection system to extract gas from the landfill. The blower(s) then discharge the gas at a slightly positive pressure towards the flare where additional particulate material is removed in the particulate filter prior to combustion in the flare.

Gas enters the flare through a flame arrestor into the multi-jet burner where it is distributed to one of the six burners. The temperature is regulated by thermocouples (temperature sensors) located through the flare stack at different heights. The temperature then regulates the amount of air allowed in to the combustion chamber through the automated louvers depending upon stack temperature. The higher the temperature the more the louvers will try to open to maintain the preset temperature, and work on the same parameter as the temperature drops the louvers close. This test

was conducted at a lower temperature than the previous stack temperature to established a lower operating temperature but, above the permitted limit of 1,600^{0}F.

This test is to provide analytical data on the combusted gas leaving the flare. The Alteration/Modification permit was to allow additional gas and air into the flare for combustion. The existing louvers limited the gas flow to approximately one-half of the permitted capacity; this test proves compliance with increased landfill gas flows being combusted in the flare. Gas flow was monitored on the strip chart at least once every 15 minutes, per permit conditions.

Typical flare operating temperature range is 1,600^{0}F to 2,000^{0}F. Flare operating temperature during this test was set at the 1,650^{0}F. Flare stack and combustion temperature was continuously monitored by the facility over the duration of the testing period.

3.3 Sample Location

Flare exhaust samples were obtained from the sample ports, of which there are four, positioned at right angles, six and a half feet from the top of the flare.

The flare inlet landfill gas supply line is 16 inches in diameter (OD) schedule 40 pipe, which is stainless steel. One sample port is located approximately 24 inches upstream of a disturbance and at 84 inches downstream of a bend in the supply piping.

4. SAMPLING/ANALYSES

The sampling/analytical program had been designed to quantify the parameters of interest outlined in Table 1-1.

4.1 Sample Location

4.1.1 Flare Exhaust

At the flare exhaust 24 sample points (12 per diameter), determined in accordance with Method 1, were utilized for the determination of the following compounds:

- PM_{10}, as particulate matter
- NO_X
- CO
- O_2/CO_2
- Flow Rate
- Moisture

A single sample point was used for the collection of the following samples:

- speciated organic compounds
- total non methane hydrocarbons
- methane

4.1.2 Landfill Gas Supply Line

A single sample point was utilized for the collection of the following compounds:

- moisture
- total non methane hydrocarbons
- CO
- CO_2/O_2
- reduced sulfur compounds
- speciated organic compounds
- BTU content

4.2 Moisture (Inlet/Outlet)

Moisture content of the landfill gas was determined using SCAQMD Method 4.1. One, sixty-minute SCAQMD Method 4.1 run was conducted at the landfill gas inlet. Moisture content of the exhaust was determined using SCAQMD Method 4.1 in conjunction with SCAQMD Method 5.1 sampling. A description of SCAQMD Method 4.1 is provided in Appendix A.

4.3 Flow Rate/Temperature (Inlet/Outlet)

The landfill gas flow rate was determined using SCAQMD Method 1.1 and 2.1. The flare exhaust flow rate was determined using SCAQMD Methods 1.1 and 2.1 in conjunction with SCAQMD Method 5.1. Descriptions of SCAQMD Methods 1.1 and 2.1 are provided in Appendix A.

4.4 PM10 as Particulate Matter (Outlet)

Horizon conducted one, 60-minute test run on the flare exhaust for particulate matter determination in accordance with SCAQMD Method 5.1 as described in Appendix A. Twenty-four traverse points were utilized. Samples were withdrawn isokinetically from each of the determined traverse points.

4.5 Oxides of Nitrogen, Carbon Monoxide, Carbon Dioxide, Oxygen (Outlet)

One, 60-minute test run was conducted at the flare exhaust. Twenty-four sample points were utilized. All sampling was performed under the guidelines of SCAQMD Method 100.1 as detailed in Appendix A.

4.6 Hydrogen Sulfide (H_2S), and C_1 - C_3 Sulfur Compounds (Inlet)

Hydrogen sulfide and C_1 - C_3 sulfur compounds samples were collected at the inlet of the flare using the Tedlar bag collection system depicted in Appendix A. All system components coming in contact with the landfill gas were polypropylene or Teflon.

All reduced sulfur samples were analyzed within 24 hours of collection. Hydrogen sulfide and C_1 - C_3 sulfur compounds were analyzed using a Method 307.91 equivalent by AtmAA, Inc. Equivalency has been formally granted by SCAQMD to AtmAA, Inc. for this Method.

4.7 Speciated Organic Compounds (Inlet/Outlet)

One inlet and three outlet samples were gathered in Tedlar bags using the Tedlar bag lung sampling procedure described in Appendix A for analysis using TO-15 (GC/MS) for speciated organic compounds (Rule 1150.1 list).

4.8 Total Non Methane Hydrocarbons, Methane (Outlet)

Duplicate samples for methane and total non methane hydrocarbon (TNMHC) samples were collected at the outlet using SCAQMD Method 25.3 as described in Appendix A.

4.9 Total Non Methane Hydrocarbons, Methane (Inlet)

Total non-methane/non-ethane hydrocarbons and methane concentration of the landfill gas were determined using ASTM D1945. A description of ASTM D1945 is provided in Appendix A.

4.10 Carbon Monoxide, Carbon Dioxide, Oxygen and Nitrogen (Inlet)

Oxygen and carbon dioxide concentrations of the landfill gas were determined using SCAQMD Method 10.1. Nitrogen was determined by difference. A description of SCAQMD Method 10.1 is provided in Appendix A.

5. RESULTS DISCUSSION

The results of the test program are provided in Table 5-1. Trace organic species emission rates and destruction efficiencies are presented in Tables 5-2, 5-3 and 5-4.

Test Critique

No sampling or analytical problems were encountered during any phase of the test program.

Table 5-1
Summary of Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007

	LANDFILL GAS	FLARE EXHAUST
Run Number	1	1
STACK GAS CHARACTERISTICS		
Temperature, degrees F*	118	1546
Moisture, %	5.0	8.1
Flow Rate, acfm	3454	
Flow Rate, dscfm	2796	21723
Fixed Gases		
Oxygen, %	1.55	12.62
Carbon Dioxide, %	37.90	7.42
Methane, %	50.61	-
BTU Value, Btu/scf	525	-
EMISSIONS		
Oxides of Nitrogen		
ppm	-	13.1
ppm @ 3% O2	-	28.4
lb/hr	-	2.07
lb/MMBtu	-	0.0377
Carbon Monoxide		
ppm	-	< 20.0
ppm @ 3% O2	-	< 43.2
lb/hr	-	< 1.92
lb/MMBtu	-	< 0.0350
Total Particulate Matter		
gr/dscf	-	0.0026
lb/hr	-	0.48
Total Non-Methane Hydrocarbons (Reactive Organic Compounds)		
ppm, as Methane	7558	2.46
lb/hr, as Methane	53.41	0.135
Sulfur Compounds		
Hydrogen Sulfide, ppm	51.4	0.000
Total Sulfur, ppm as H2S	61.9	-
Oxides of Sulfur**		
lb/hr	-	1.75

* As recorded at the Reference Method sample probe, not at the permanent thermocouple.
** Calculated from sulfur balance

Table 5-2
Trace Organic Species
Destruction Efficiency Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007
Run 1

Species	Inlet		Outlet		Destruction Efficiency (%)
	Concentration (ppb)	Emission Rate (lb/hr)	Concentration (ppb)	Emission Rate (lb/hr)	
Hydrogen Sulfide	51400	7.75E-01	< 500	< 5.86E-02	> 92.44
Benzene	2910	1.00E-01	< 0.6	< 1.61E-04	> 99.84
Benzylchloride	< 80	< 4.49E-03	< 0.80	< 3.49E-04	NA
Chlorobenzene	< 80	< 4.00E-03	< 0.8	< 3.10E-04	NA
Dichlorobenzenes	236	1.53E-02	< 0.6	< 3.03E-04	> 98.02
1,1-dichloroethane	172	7.53E-03	< 0.8	< 2.72E-04	> 96.39
1,2-dichloroethane	221	9.67E-03	< 0.8	< 2.72E-04	> 97.19
1,1-dichloroethylene	< 80	< 3.43E-03	< 0.8	< 2.66E-04	NA
Dichloromethane	< 80	< 3.01E-03	1.49	4.35E-04	NA
1,2-dibromoethane	< 60	< 4.98E-03	< 0.6	< 3.87E-04	NA
Perchloroethene	852	8.93E-02	< 0.60	< 4.88E-04	99.45
Carbon tetrachloride	< 60	< 4.08E-03	< 0.6	< 3.17E-04	NA
Toluene	13200	5.37E-01	0.83	2.62E-04	99.951
1,1,1-trichloroethane	< 60	< 3.53E-03	< 0.6	< 2.74E-04	NA
Trichloroethene	408	2.36E-02	< 0.6	< 2.70E-04	> 98.86
Chloroform	< 60	< 3.16E-03	< 0.6	< 2.45E-04	NA
Vinyl Chloride	393	1.09E-02	< 0.8	< 1.72E-04	> 98.42
m xylenes	5640	2.64E-01	0.68	2.48E-04	99.91
o+p xylene	1720	8.06E-02	< 0.6	< 2.18E-04	> 99.73
TNMHC	7558000	5.35E+01	2460	1.35E-01	99.75

Note: All values preceded by "<" are below the detection limit - reported values are detection limit values.
NA--Not applicable: Destruction efficiency cannot be calculated since both inlet and outlet values are below the detection limit.

Table 5-3
Trace Organic Species
Destruction Efficiency Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007
Run 2

Species	Inlet		Outlet		Destruction Efficiency (%)
	Concentration (ppb)	Emission Rate (lb/hr)	Concentration (ppb)	Emission Rate (lb/hr)	
Hydrogen Sulfide	51400	7.75E-01	< 500	< 5.86E-02	> 92.44
Benzene	2910	1.00E-01	< 0.6	< 1.61E-04	> 99.84
Benzylchloride	< 80	< 4.49E-03	< 0.80	< 3.49E-04	92.23
Chlorobenzene	< 80	< 4.00E-03	< 0.8	< 3.10E-04	NA
Dichlorobenzenes	236	1.53E-02	< 0.6	< 3.03E-04	> 98.02
1,1-dichloroethane	172	7.53E-03	< 0.8	< 2.72E-04	> 96.39
1,2-dichloroethane	221	9.67E-03	< 0.8	< 2.72E-04	> 97.19
1,1-dichloroethylene	< 80	< 3.43E-03	< 0.8	< 2.66E-04	NA
Dichloromethane	< 80	< 3.01E-03	1.12	3.27E-04	NA
1,2-dibromoethane	< 60	< 4.98E-03	< 0.6	< 3.87E-04	NA
Perchloroethene	852	8.93E-02	< 0.60	< 4.88E-04	99.45
Carbon tetrachloride	< 60	< 4.08E-03	< 0.6	< 3.17E-04	NA
Toluene	13200	5.37E-01	< 0.8	< 2.53E-04	> 99.953
1,1,1-trichloroethane	< 60	< 3.53E-03	< 0.6	< 2.74E-04	NA
Trichloroethene	408	2.36E-02	< 0.6	< 2.70E-04	> 98.86
Chloroform	< 60	< 3.16E-03	< 0.6	< 2.45E-04	NA
Vinyl Chloride	393	1.09E-02	< 0.8	< 1.72E-04	> 98.42
m xylenes	5640	2.64E-01	< 0.6	< 2.18E-04	> 99.92
o+p xylene	1720	8.06E-02	< 0.6	< 2.18E-04	> 99.73
TNMHC	7558000	5.35E+01	2460	1.35E-01	99.75

Note: All values preceded by "<" are below the detection limit - reported values are detection limit values.
NA--Not applicable: Destruction efficiency cannot be calculated since both inlet and outlet values are below the detection limit.

Table 5-4
Trace Organic Species
Destruction Efficiency Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007
Run 3

Species	Inlet		Outlet		Destruction Efficiency (%)
	Concentration (ppb)	Emission Rate (lb/hr)	Concentration (ppb)	Emission Rate (lb/hr)	
Hydrogen Sulfide	51400	7.75E-01	< 500	< 5.86E-02	> 92.44
Benzene	2910	1.00E-01	1.53	4.10E-04	99.59
Benzylchloride	< 80	< 4.49E-03	< 0.80	< 3.49E-04	92.23
Chlorobenzene	< 80	< 4.00E-03	< 0.8	< 3.10E-04	NA
Dichlorobenzenes	236	1.53E-02	< 0.6	< 3.03E-04	> 98.02
1,1-dichloroethane	172	7.53E-03	< 0.8	< 2.72E-04	> 96.39
1,2-dichloroethane	221	9.67E-03	< 0.8	< 2.72E-04	> 97.19
1,1-dichloroethylene	< 80	< 3.43E-03	< 0.8	< 2.66E-04	NA
Dichloromethane	< 80	< 3.01E-03	1.35	3.94E-04	NA
1,2-dibromoethane	< 60	< 4.98E-03	< 0.6	< 3.87E-04	NA
Perchloroethene	852	8.93E-02	< 0.60	< 4.88E-04	99.45
Carbon tetrachloride	< 60	< 4.08E-03	< 0.6	< 3.17E-04	NA
Toluene	13200	5.37E-01	8.68	2.74E-03	99.489
1,1,1-trichloroethane	< 60	< 3.53E-03	< 0.6	< 2.74E-04	NA
Trichloroethene	408	2.36E-02	< 0.6	< 2.70E-04	> 98.86
Chloroform	< 60	< 3.16E-03	< 0.6	< 2.45E-04	NA
Vinyl Chloride	393	1.09E-02	< 0.8	< 1.72E-04	> 98.42
m xylenes	5640	2.64E-01	7.48	2.72E-03	98.97
o+p xylene	1720	8.06E-02	2.82	1.03E-03	98.73
TNMHC	7558000	5.35E+01	2460	1.35E-01	99.75

Note: All values preceded by "<" are below the detection limit - reported values are detection limit values.
NA--Not applicable: Destruction efficiency cannot be calculated since both inlet and outlet values are below the detection limit.

Facility: **BFI SunShine**
Source: **Flare 8**
Job No.: **B06-015**
Date: **06/01/07**

STANDARD TEMPERATURE	Degrees F	60
RUN NUMBER	******	1
CLOCK TIME: INITIAL	******	1218
CLOCK TIME: FINAL	******	1318
AVG. STACK TEMPERATURE	Degrees F	118
AVG. SQUARE DELTA P	Inches H20	0.5617
BAROMETRIC PRESSURE	Inches HG	27.73
SAMPLING TIME	Minutes	60
SAMPLE VOLUME	Cubic Feet	44.808
AVG. METER TEMP.	Degrees F	83
AVG. DELTA H	Inches H20	1.60
DGM CALIB. FACTOR [Y]	******	0.988
WATER COLLECTED	Milliliters	44
CO 2	Percent	37.90
O 2	Percent	1.55
CO	Percent	0.00
CH4	Percent	50.61
N 2	Percent	8.33
STACK AREA	Square Inches	201.1
STATIC PRESSURE	Inches WG	8.20
PITOT COEFFICIENT	******	0.99
SAMPLE VOLUME DRY	DSCF	39.47
WATER AT STD.	SCF	2.1
MOISTURE	Percent	5.0
MOLE FRACTION DRY GAS	******	0.95
MOLECULAR WT.DRY	lb/lb Mole	27.60
EXCESS AIR	Percent	239
MOLECULAR WT. WET	lb/lb Mole	27.12
STACK GAS PRESSURE	Inches HG	28.33
STACK VELOCITY	AFPM	2474
VOLUMETRIC FLOWRATE, DRY STD.	DSCFM	2796
VOLUMETRIC FLOWRATE, ACTUAL	ACFM	3454

EMISSION RATES

SAMPLE A		
TNMHC Concentration, as CH4	ppm	7815
TNMHC Concentration, as CH4	mg/dscf	149
TNMHC Emission Rate, as CH4	lb/hr	55.2
SAMPLE B		
TNMHC Concentration, as CH4	ppm	7301
TNMHC Concentration, as CH4	mg/dscf	140
TNMHC Emission Rate, as CH4	lb/hr	51.6
AVERAGE		
TNMHC Concentration, as CH4	ppm	7558
TNMHC Concentration, as CH4	mg/dscf	144
TNMHC Emission Rate, as CH4	lb/hr	53.4

SCAQMD Method 307.91

Facility: **BFI SunShine**
Source: **Flare 8**
Job No.: **B06-015**
Date: **06/01/07**

Sulfur Compounds

Speciated Compound		Concentration ppm, as H2S	No. of S molecules in Compound	Total S ppm, as H2S	SO2 Conc. mg/dscf	Avg. Inlet Flow Rate dscfm	SO2 Rate lb/hr
Hydrogen Sulfide		51.4	1	51.4	3.94	2796	1.46
Carbonyl Sulfide		0.24	1	0.24	0.018	2796	0.0068
Methyl mercaptan		3.70	1	3.70	0.283	2796	0.105
Ethyl mercaptan	<	0.2	1	0.2	0.02	2796	0.006
Dimethyl sulfide		5.26	1	5.26	0.403	2796	0.149
Carbon disulfide		0.19	2	0.38	0.029	2796	0.011
Dimethyl disulfide	<	0.1	2	0.2	0.02	2796	0.006
iso-propyl mercaptan		0.40	1	0.40	0.031	2796	0.011
n-propyl mercaptan	<	0.1	1	0.1	0.01	2796	0.003
Total				61.9			1.75

SCAQMD Method 100.1 Emission Rates

Facility: BFI SunShine
Source: Flare 8
Job No.: B06-015
Date: 06/01/07

Run Number	******		1
Load	******		as Found
EPA F-Factor	dscf/MMBtu		9399
Stack Flow Rate	dscfm		21723
Oxygen	%		12.62
Carbon Dioxide	%		7.42
Oxides of Nitrogen			
Concentration	ppm		13.1
Concentration @ 3% O2	ppm		28.4
Concentration	lb/dscf		1.59E-06
Emission Rate	lb/MMBtu		3.77E-02
Emission Rate	lb/hr		2.07
Carbon Monoxide			
Concentration	ppm	<	20.0
Concentration @ 3% O2	ppm	<	43.2
Concentration	lb/dscf	<	1.48E-06
Emission Rate	lb/MMBtu	<	3.50E-02
Emission Rate	lb/hr	<	1.92

Facility:	**BFI**	**Run No.:**	**1**
Source:	**Flare 8**	**Fuel:**	**LFG**
Job No.:	**B16-015**	**Std. O2:**	**3**
Date:	**06/01/07**		

	O2 %	CO2 %	NOx ppm	CO ppm
Range:	25	15	25	100
Span:	12.00	7.00	13.30	51.20
Low:				
High:	20.05	11.97	24.60	77.10

** POST-TEST DRIFT (DIRECT)**

Values				
Zero:	0.00	0.05	0.00	0.00
Span:	12.02	7.03	13.30	51.00

Percent Drift				
Zero:	0.00	0.33	0.00	0.00
Span:	0.08	0.20	0.00	-0.20

** PRE-TEST BIAS **

Values				
Zero:	0.00	0.05	0.10	0.00
Span:	11.99	7.00	13.20	50.80

** POST-TEST BIAS **

Values				
Zero:	0.00	0.10	0.45	0.00
Span:	12.10	7.06	13.50	49.80

** BIAS CORRECTION **

Zero Average	0.00	0.08	0.28	0.00
Span Average	12.05	7.03	13.35	50.30

** POST-TEST DRIFT (BIAS)**

Percent Drift				
Zero:	0.00	-0.33	-1.40	0.00
Span:	-0.44	-0.40	-1.20	1.00

Bias-Corrected Concentration	**12.62**	**7.42**	**13.12**	**2.67**
Bias-Corrected Conc.(O2 adjusted)			**28.37**	**5.78**

** RAW AVERAGE CONCENTRATION **

Average:		12.67	7.45	13.17	2.63
O2 adjust:	3.0			28.65	5.71
Date	Time	O2	CO2	NOx	CO
1-Jun-07	1218	13.05	7.12	12.55	-2.08 a
1-Jun-07	1219	13.45	6.80	11.31	-0.90
1-Jun-07	1220	13.27	6.91	10.20	26.12
1-Jun-07	1221	13.03	7.18	12.74	-1.10
1-Jun-07	1222	13.16	7.02	12.54	-1.95
1-Jun-07	1223	13.28	6.92	11.83	3.92
1-Jun-07	1224	13.19	6.99	12.12	1.76
1-Jun-07	1225	13.16	7.05	12.07	-1.29
1-Jun-07	1226	13.19	7.01	12.12	-1.88

Facility: BFI SunShine
Source: Flare 8
Job No.: B06-015
Date: 06/01/07

PRETEST	CALIBRATION ERROR			
LEAK CHECK	Good			
RANGE :	25 O2	15 CO2	25 NOx	100 CO
ZERO				
Instrument	0.00	0.00	0.00	0.00
Cylinder	0.00	0.00	0.00	0.00
Difference (%)	0.00	0.00	0.00	0.00
LOW LEVEL				
Instrument				
Cylinder				
Difference (%)				
MID LEVEL				
Instrument	12.00	6.99	13.10	51.00
Cylinder	12.00	7.00	13.30	51.20
Difference (%)	0.00	-0.07	-0.80	-0.20
HIGH LEVEL				
Instrument	20.00	11.90	24.50	76.00
Cylinder	20.05	11.97	24.60	77.10
Difference (%)	-0.20	-0.47	-0.40	-1.10

PRETEST	LINEARITY	
	Cylinder	Instrument
	O2	
Zero	0.00	0.00
High Level	20.05	20.00
Slope	1.00	
Intercept	0.00	Status
Predicted Value	11.97	<1
Linearity (%)	0.12	PASS
	CO2	
Zero	0.00	0.00
High Level	11.97	11.90
Slope	1.01	
Intercept	0.00	Status
Predicted Value	6.96	<1
Linearity (%)	0.21	PASS
	NOx	
Zero	0.00	0.00
High Level	24.60	24.50
Slope	1.00	
Intercept	0.00	Status
Predicted Value	13.25	<1
Linearity (%)	-0.58	PASS
	CO	
Zero	0.00	0.00
High Level	77.10	76.00
Slope	1.01	
Intercept	0.00	Status
Predicted Value	50.47	<1
Linearity (%)	0.53	PASS

SYSTEM RESPONSE TIME	#1	#2
Upscale		
CO	48	49
NOx	31	29
O2	30	32
CO2	28	27
Downscale		
CO	48	48
NOx	30	30
O2	31	30
CO2	27	25

NO2 CONVERTER EFFICIENCY	ppm	%	status
Cylinder(C0)	18.40		
NO Mode(C1)	0.75		
NOx Mode(C2)	17.55		
D1	17.65		
D2	16.80		
D3	0.85		
CE		95.18	
CE > 90 %			PASS
D3 <1.0 ppm	0.85		PASS

POST TEST	CALIBRATION ERROR			
LEAK CHECK	Good			
	O2	CO2	NOx	CO
ZERO				
Instrument	0.00	0.05	0.00	0.00
Cylinder	0.00	0.00	0.00	0.00
Difference (%)	0.00	0.33	0.00	0.00
LOW LEVEL				
Instrument				
Cylinder				
Difference (%)				
MID LEVEL				
Instrument	12.02	7.03	13.30	51.00
Cylinder	12.00	7.00	13.30	51.20
Difference (%)	0.08	0.20	0.00	-0.20
HIGH LEVEL				
Instrument	20.25	12.08	24.38	77.00
Cylinder	20.05	11.97	24.60	77.10
Difference (%)	0.80	0.70	-0.90	-0.10

POST TEST	LINEARITY	
	Cylinder	Instrument
	O2	
Zero	0.00	0.00
High Level	20.05	20.25
Slope	0.99	
Intercept	0.00	Status
Predicted Value	12.12	<1
Linearity (%)	-0.40	PASS
	CO2	
Zero	0.00	0.05
High Level	11.97	12.08
Slope	1.00	
Intercept	-0.05	Status
Predicted Value	7.08	<1
Linearity (%)	-0.35	PASS
	NOx	
Zero	0.00	0.00
High Level	24.60	24.38
Slope	1.01	
Intercept	0.00	Status
Predicted Value	13.18	<1
Linearity (%)	0.49	PASS
	CO	
Zero	0.00	0.00
High Level	77 10	77.00
Slope	1.00	
Intercept	0.00	Status
Predicted Value	51.13	<1
Linearity (%)	-0.13	PASS

Table 5-3
Trace Organic Species
Destruction Efficiency Results
BFI - Sunshine Canyon Landfill
Flare 8
June 1, 2007
Run 2

		INLET Flow rate	2796	dscfm		OUTLET Flow rate	21723	dscfm
Species	Conc. (ppb)	Conc. (mg/dscf)	Em. Rate (lb/hr)		Conc. (ppb)	Conc. (mg/dscf)	Em. Rate (lb/hr)	Dest. Eff. (%)
Hydrogen Sulfide	51400	2.09E+00	7.75E-01		< 500	< 2.04E-02	5.86E-02	92.44
Benzene	2910	2.71E-01	1.00E-01		< 0.6	< 5.59E-05	< 1.61E-04	> 99.84
Benzylchloride	< 80	< 1.21E-02	< 4.49E-03		< 0.8	< 1.21E-04	3.49E-04	92.23
Chlorobenzene	< 80	< 1.08E-02	< 4.00E-03		< 0.8	< 1.08E-04	< 3.10E-04	NA
Dichlorobenzenes	236	4.15E-02	1.53E-02		< 0.6	< 1.05E-04	< 3.03E-04	> 98.02
1,1-dichloroethane	172	2.04E-02	7.53E-03		< 0.8	< 9.47E-05	< 2.72E-04	> 96.39
1,2-dichloroethane	221	2.61E-02	9.67E-03		< 0.8	< 9.47E-05	< 2.72E-04	> 97.19
1,1-dichloroethylene	< 80	< 9.27E-03	< 3.43E-03		< 0.8	< 9.27E-05	< 2.66E-04	NA
Dichloromethane	< 80	< 8.13E-03	< 3.01E-03		1.12	1.14E-04	3.27E-04	NA
1,2-Dibromoethane	< 60	< 1.35E-02	< 4.98E-03		< 0.6	< 1.35E-04	< 3.87E-04	NA
Perchloroethene	852	2.41E-01	8.93E-02		< 0.6	< 1.70E-04	4.88E-04	99.45
Carbon tetrachloride	< 60	< 1.10E-02	< 4.08E-03		< 0.6	< 1.10E-04	< 3.17E-04	NA
Toluene	13200	1.45E+00	5.37E-01		< 0.8	< 8.80E-05	< 2.53E-04	> 99.95
1,1,1-trichloroethane	< 60	< 9.54E-03	< 3.53E-03		< 0.6	< 9.54E-05	< 2.74E-04	NA
Trichloroethene	408	6.39E-02	2.36E-02		< 0.6	< 9.39E-05	< 2.70E-04	> 98.86
Chloroform	< 60	< 8.53E-03	< 3.16E-03		< 0.6	< 8.53E-05	< 2.45E-04	NA
Vinyl Chloride	393	2.94E-02	1.09E-02		< 0.8	< 5.98E-05	< 1.72E-04	> 98.42
m+p-xylenes	5640	7.14E-01	2.64E-01		< 0.6	< 7.60E-05	< 2.18E-04	> 99.92
o-xylene	1720	2.18E-01	8.06E-02		< 0.6	< 7.60E-05	< 2.18E-04	> 99.73
TNMHC	7558000	1.45E+02	5.35E+01		2460	4.70E-02	1.35E-01	99.75

Note: All values preceded by "<" are below the detection limit. The reported values are the detection limit.
NA--Not Applicale: Destruction efficiency can not be calculated since both inlet and outlet values are below the detection limit.

APPENDIX C - Field Data

PARTICULATE FIELD DATA

PLANT Sunshine Cyn L.F.
DATE 6-1-07
LOCATION Sylmar, CA
OPERATOR CSM, TW, ES
SOURCE Flare # 8
RUN NO. 1 M-4 INLET
SAMPLE BOX NO. C-9

TIME START 1218

B06-015

METER BOX NO. 6
METER ΔH @ 1.555
Y= 0.988
PROBE I.D. NO. —
NOZZLE DIAMETER, in. —
STACK DIAMETER, in.
PROBE HEATER SETTING —
HEATER BOX SETTING —
Δ Cp FACTOR
FILTER NO. —

ASSUMED MOISTURE, % —
AMBIENT TEMPERATURE 56
BARO. PRESS. 27.73
STATIC PRESS. —
NOMAGRAPH INDEX —

PRE TEST LEAK CHECKS
METER 0.002 @ 15 in. Hg
PITOTS — @ — in. Hg
ORSAT

P#	TIME	T_s °F	Δ P in H_2O	√Δ P	Δ H in H_2O	Vm ft^3	$T_{m\,IN}$ °F	T_m OUT °F	OVEN °F	IMP. OUT °F	VAC. (in Hg)
	0	—	—	—	1.6	458.444	71	68		58	2
	10				1.6	464.3	82	76		56	2
	20				1.6	471.2	96	77		54	2
	30				1.6	479.2	97	77		53	2
	40				1.6	487.2	98	77		53	2
	50				1.6	495.2	98	78		51	2
	60				—	503.252	—	—		—	—
Avg.					1.6	44.808		82.9			

TIME END = 1318

SB SB SB

Volume of Liquid Water Collected	Impinger Volume 1	2	3	4	Silica Gel Wght. 5
Final	119	108	2		265
Initial	100	100	0		250
Liquid Collected	19	8	2		15
Total Vol. Collected					44

SB

POST TEST LEAK CHECKS
Meter Leak @ 15" in. Hg
Pitots @ in. Hg
Orsat

Orsat Meas.	Time	CO_2	O_2	CO	N_2
1					
2					
3					

Nozzle Cal	D_1	D_2	D_3	Average

INTEGRATED BAG SAMPLING DATA FORM

Run Number: 1

Date: 6-1-07 Plant: _____

Sampling Location: FLARE # 8 - OUTLET

Barometric Pressure: 27.73

Ambient Temp. °F: 72°F Stack Temp. °F: _____

Operator: CSM, TW, ES

Probe # P3

Time	Traverse Point	Rate Meter Flow Rate (Q), cm^3/min.	% Dev.[a]
00	Set		0
10			0
20			0
30			0
40			0
50			0
60			0
		Avg. =	

a

$$\%\ Dev. = \left(\frac{Q - Q_{avg}}{Q_{avg}}\right) 100;\ must\ be \leq 10\%$$

H:\WPDOCS\FORMS\Integrated Bag Sampling Form.wpd

APPENDIX D - Laboratory Data

Calculated values for Specific Volume, BTU and F (factor)

Report Date: June 27, 2007
Client: Horizon Air Measurement Services
Project Location: BFI Sunshine Canyon Landfill
Date Received: June 1, 2007
Date Analyzed: June 1, & 5, 2007
AtmAA Lab No.: 01527-35 In-1

Specific volume, BTU, and F factor are calculated using labortatory analysis results for methane, carbon dioxide, nitrogen, oxygen, TGNMO, and sulfur compounds in equations that include assumed values for the specific volume of gases (CH4, CO2, N2, O2, Ar, and (CH2)n). The specific volume of gases were taken from the Scott Speciality Gases catalogue, 2001, and represents as is gas at 60° F and 1 atm. The F factor is calculated according to the equation in ASTM D-3588.B89

Component	Mole %	Wt %	C,H,O,N,S,	Wt.%
Methane	50.57	29.18	Carbon	38.59
Carbon dioxide	37.81	59.99	Hydrogen	7.35
Nitrogen	8.38	8.46	Oxygen	45.49
Oxygen	1.61	1.86	Nitrogen	8.46
Argon	0.072	0.103	Argon	0.10
$(CH_2)_n$	0.782	0.395	Sulfur	0.00

Specific Volume	13.430
BTU/ft^3	517
BTU/ lb.	6944
F (factor)	9513

"as is" gas at 60° F, 1 atm, where CH4-1010, TGNMO-804 BTU/cu.ft.

Component	Specific volume reference values *	
Methane	23.35	(ft^3/lb)
Carbon dioxide	8.59	
Nitrogen	13.54	
Oxygen	11.87	
Argon	9.52	
(CH2)n	21	

* reference, Scott Specialty Gases Catalogue, 2001 adjusted to 60°F

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

Organic Carbon Analysis in Water Impinger and Methane & TGNMO Analysis in SUMMA Canister Samples from Impinger/Canister Train Sample Collection

Report Date: June 27, 2007
Client: Horizon Air Measurement Services, Inc.
Client Project No.: B06 - 015
Source Location : BFI Sunshine Canyon Landfill
Source ID: Flare Outlet

Date Received: June 1, 2007
Date Analyzed: June 1, - 6, 2007

Methane and total gaseous non-methane organics were measured by flame ionization detection/total combustion analysis (FID/TCA). Organic carbon in water vial samples were measured by Dohrman total organic carbon analyzer, water FID/TCA.

Lab No.	ID	Canister Methane	Canister Ethane	Canister TGNMO	Impinger Carbon	Impinger Volume	P_1	P2
		(concentration, ppmv)				(ml)		
01527-40	S3	<1	<1	1.28	---	---	535	820
	Impinger H1	---	---	---	1.13	2.64	--	--
01527-41	S4	<1	<1	1.74	---	---	442	820
	Impinger H2	---	---	---	0.77	2.74	--	--

TGNMO is total gaseous non-methane organics (excluding ethane), reported as ppmv carbon. Ethane is reported as ppmv carbon.
** Note - Impinger sample results are not field blank corrected. The field blank (impinger H3) contained 0.55 ug carbon, corresponding to 0.29 ppm carbon for a 3.92 liter sample.*
P_1 and P_2 are initial and final pressures measured in mm Hg.

Michael L. Porter
Laboratory Director

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

Hydrogen Sulfide and Reduced Sulfur Compounds
Analysis in Tedlar Bag Sample

Report Date: June 15, 2007
Client: Horizon Air Measurements
Project Location: BFI Sunshine
Client Project No.: B05-015
Date Received: June 1, 2007
Date Analyzed: June 5 2007

ANALYSIS DESCRIPTION

Hydrogen sulfide was analyzed by gas chromatography with a Hall electrolytic conductivity detector operated in the oxidative sulfur mode. All other components were measured by GC/ Mass Spec.

	AtmAA Lab No.:	01527-35
	Sample I.D.:	B6-15-TB-I-1
Components		*(Concentration in ppmv)*
Hydrogen sulfide		51.4
Carbonyl sulfide		0.24
Methyl mercaptan		3.70
Ethyl mercaptan		<0.2
Dimethyl sulfide		5.26
Carbon disulfide		0.19
isopropyl mercaptan		0.40
n-propyl mercaptan		<0.1
Dimethyl disulfide		<0.1
TRS		61.4

TRS - total reduced sulfur

Michael L. Porter
Laboratory Director

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

R1150.1 Component Analysis in Tedlar Bag Sample, by GC/MS, TO-15

Report Date: June 25, 2007
Client: Horizon Air Measurement Services
Project Location: BFI Sunshine Canyon
Client Project No.: B05-015
Date Received: June 1, 2007
Date Analyzed: June 6, 2007

AtmAA Lab No.: 01527-35
Sample ID: B6-15-TB-I-1

Components	*(Concentations in ppmv)*
Hydrogen sulfide	51.9
	(Concentations in ppbv)
Benzene	2910
Benzylchloride	<80
Chlorobenzene	<80
Dichlorobenzenes*	236
1,1-dichloroethane	172
1,2-dichloroethane	221
1,1-dichloroethylene	<80
Dichloromethane	<80
1,2-dibromoethane	<60
Perchloroethylene	852
Carbon tetrachloride	<60
Toluene	13200
1,1,1-trichloroethane	<60
Trichloroethene	408
Chloroform	<60
Vinyl chloride	393
m+p-xylenes	5640
o-xylene	1720

** total amount containing meta, para and ortho isomers.*

Michael L. Porter
Laboratory Director

AtmAA Inc.
23917 Craftsman Rd., Calabasas, CA 91302 • (818) 223-3277 • FAX (818) 223-8250
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

R1150.1Component Analysis in Tedlar Bag Samples, by GC/MS, TO-15

Report Date: June 25, 2007
Client: Horizon Air Measurement Services
Project Location: BFI Sunshine Canyon
Client Project No.: B05-015
Date Received: June 1, 2007
Date Analyzed: June 6, 2007

AtmAA Lab No.:	01527-37	01527-38	01527-39
Sample ID:	B6-15-TB-O-1	B6-15-TB-O-2	B6-15-TB-O-3

(Concentations in ppbv)

Components			
Hydrogen sulfide	<500	<500	<500
Benzene	<0.6	<0.6	1.53
Benzylchloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.8	<0.8	<0.8
Dichlorobenzenes*	<0.6	<0.6	<0.6
1,1-dichloroethane	<0.8	<0.8	<0.8
1,2-dichloroethane	<0.8	<0.8	<0.8
1,1-dichloroethylene	<0.8	<0.8	<0.8
Dichloromethane	1.49	1.12	1.35
1,2-dibromoethane	<0.6	<0.6	<0.6
Perchloroethylene	<0.6	<0.6	<0.6
Carbon tetrachloride	<0.6	<0.6	<0.6
Toluene	0.83	<0.8	8.68
1,1,1-trichloroethane	<0.6	<0.6	<0.6
Trichloroethene	<0.6	<0.6	<0.6
Chloroform	<0.6	<0.6	<0.6
Vinyl chloride	<0.8	<0.8	<0.8
m+p-xylenes	0.69	<0.6	7.48
o-xylene	<0.6	<0.6	2.82

** total amount containing meta, para and ortho isomers.*

Michael L. Porter
Laboratory Director

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location
BFI Sunshine Cyn	Sylmar CA
Project No.	**Field Logbook No.**
B05-015	
Sampler: (*Signature*)	**Chain of Custody Tape No.**

Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample	ASTM D3588 | D1945 O2/CO2	EPA TO 15	SCAQMD 307.91				REMARKS
B615TB-I-1	06/01/07		0152735	5 L bag	X	X	X				INLET
B615TB-I-2			36		X						INLET
B615-TB-O-1			37			X					OUTLET
B615-TB-O-2			38			X					OUTLET
B615-TB-O-3			39			X					outlet

Relinquished by: (*Signature*)	Date	Time	Received by: (*Signature*)	Date	Time
	6/1/07	1515			
Relinquished by: (*Signature*)	**Date**	**Time**	**Received by: (*Signature*)**	**Date**	**Time**
Relinquished by: (*Signature*)	**Date**	**Time**	**Received for Laboratory: (*Signature*)**	**Date**	**Time**
				6-1-07	3:15
Sample Disposal Method:			**Disposed of by: (*Signature*)**	**Date**	**Time**

SAMPLE COLLECTOR

HORIZON AIR MEASUREMENT SERVICES, INC
996 Lawrence Drive, Suite 108
Newbury Park, CA 91320
(805) 498-8781 Fax (805) 498-3173

ANALYTICAL LABORATORY

AtmAA

№ 09430

DATA SHEET FOR PARTICULATE MATTER SCAQMD METHOD 5.1

DATE SAMPLED: 06/01/07
DATE EXTRACTED: 06/05/007

RUN #1

	SAMPLE ID	BEAKER/ FILTER ID	VOLUME	INITIAL	FINAL	NET WEIGHT(g)
A - FILTER CATCH	B06015-M5-F8-PF-1	G7014	NA	0.1154	0.1155	0.0001
FILTER ACID						0.0000
FILTER SULFATE						
						0.0000
B - PROBE CATCH						0.0000
PROBE ACID						
PROBE SULFATE						0.0000
C - IMP.CATCH(INSOL)	B06015-M5-F8-EF-1	G7025	650	0.1177	0.1177	0.0000
INSOLUBLE ACID						0.0000
INSOLUBLE SULFATE						0.0000
D - IMP. CATCH (SOL)	B06015-M5-F8-DI-1	7049	650	30.5863	30.5955	0.0092
SOLUBLE ACID						0.0000
SOLUBLE SULFATE						0.0000
E - ORGANIC EXTRACT						0.0000
TOTAL PARTICULATE	(A+B+C+D+E)					0.0093
SOLID PARTICULATE	(A+B+C+D)					0.0093

CHAIN OF CUSTODY RECORD

Client/Project Name: BFI Sunshine	Project Location: Sunshine Cyn, Sylmar
Project No.: B06-015	Field Logbook No.:
Sampler: (*Signature*) [signature]	Chain of Custody Tape No.:

ANALYSES: SCAMD MS: (NO OE)

Sample No./ Identification	Date	Time	Lab Sample Number	Type of Sample	SCAMD MS: (NO OE)						REMARKS
B06015MSF8PF1	06/01/07			PF 47mm 7014	X						PF # 7014
B06015MSF8 DI1	↓			DI H_2O	X						

Relinquished by: (*Signature*)	Date	Time	Received by: (*Signature*)	Date	Time
[signature]	06/01/07				
Relinquished by: (*Signature*)	Date	Time	Received by: (*Signature*)	Date	Time
Relinquished by: (*Signature*)	Date	Time	Received for Laboratory: (*Signature*)	Date	Time
			[signature]	06.04.07	0700
Sample Disposal Method:			Disposed of by: (*Signature*)	Date	Time

SAMPLE COLLECTOR

HORIZON AIR MEASUREMENT SERVICES, INC
996 Lawrence Drive, Suite 108
Newbury Park, CA 91320
(805) 498-8781 Fax (805) 498-3173

ANALYTICAL LABORATORY

HAMS (N.P, CA)

№ 09428

GAS TO FLARE RECORDER

FLARE # 8

SOURCE TEST DATE
June 1, 2007

Gas flowing to the flare is shown on the recorder. Gas is calculated with a Rosemont differential pressure, Rosemont pressure and Temperature elements, then the actual gas volume is calculated by this recorder and a line is drawn for the actual volume going to the Flare. The range of this recorder is from 0 scfm to 4200 scfm. Flow instrumentation was calibrated on May 31, 2007.

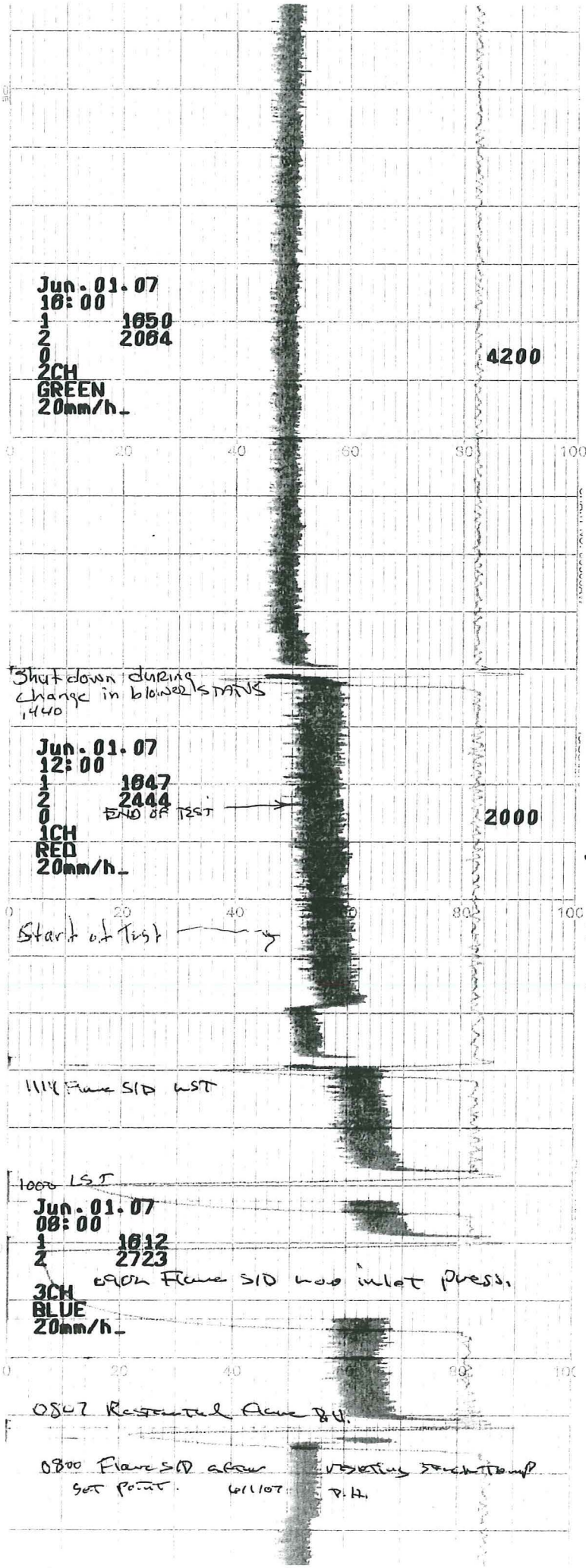
The line at approximately 56% of the chart value correlates to 2,352 scfm. Total flow combusted for the day was 3,035,340 scf.

This strip chart recorder paper is kept on-site at Sunshine Canyon Landfill.

All data on this page is true and accurate.

John C. Burns
Operations Supervisor – Landfill Gas & Liquids

June 4, 2007



STACK TEMPERATURE RECORDER

FLARE # 8

SOURCE TEST DATE
June 1, 2007

Stack temperature recorder is set to record the temperature of the exhaust gases exiting the stack. The recorder is set to record real time data from 0°F to 2000° F.

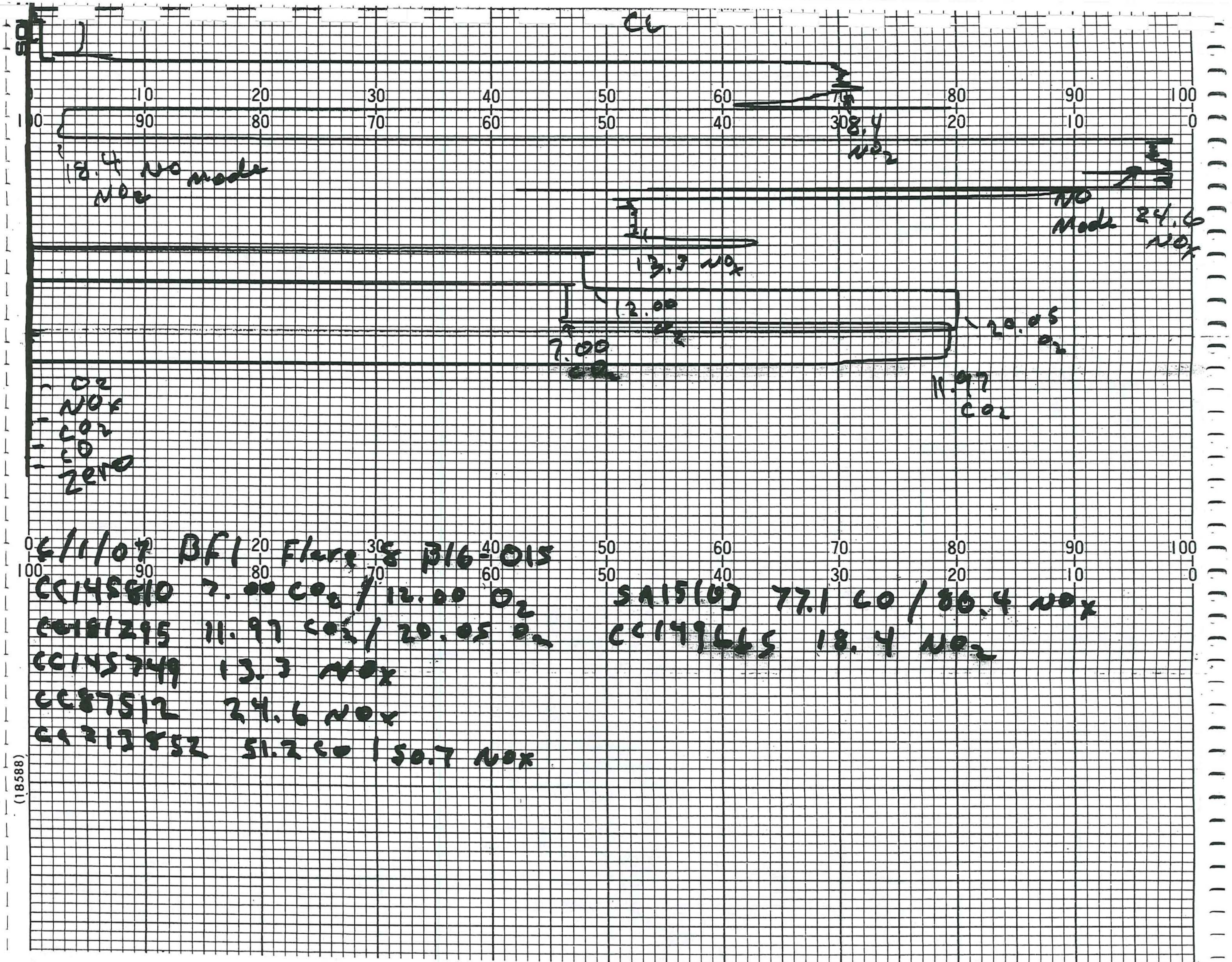
The line at 82.5% of total range of scale is equivalent to 1650°F.

This strip chart recorder paper is kept on-site at Sunshine Canyon Landfill.

All data on this page is true and accurate.

John C. Burns
Operations Supervisor – Landfill Gas & Liquids

June 4, 2007


CC
18.4 NO mode
NO2
308.4
NO2
NO Mode
24.6 NOx
13.3 NOx
12.00 O2
7.00 CO2
20.05 O2
11.97 CO2
O2
NOx
CO2
CO
Zero
6/11/07 BF1 Flare 3&4 B16-015
CC145810 7.00 CO2 / 12.00 O2
CC181295 11.97 CO2 / 20.05 O2
CC145749 13.3 NOx
CC87512 24.6 NOx
CC313852 51.2 CO / 50.7 NOx
SA15103 77.1 CO / 80.4 NOx
CC149665 18.4 NO2
(18588)

SOLTEC
CHART NO. ZD1-01-25-2

APPENDIX G - Calibration Data

STACK TEMPERATURE SENSOR CALIBRATION DATA- APEX PROBE ASSEMBLIES

Date: 05/02/07
Calibrated by: BJ

THERMOCOUPLE ID:

	ICE WATER						ABSOLUTE T DIFF., %			BOILING WATER						ABSOLUTE T DIFF., %			BOILING OIL						ABSOLUTE T DIFF., %		
	REF			TC						REF			TC						REF			TC					
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Stainless Steel Probes																											
3-1	32	32	32	32	31	31	0.0	0.2	0.2	212	212	212	213	212	212	-0.1	0.0	0.0	538	538	536	532	535	534	0.6	0.3	0.2
4-2	32	32	32	30	32	32	0.4	0.0	0.0	212	212	212	210	210	210	0.3	0.3	0.3	534	536	534	531	531	531	0.3	0.5	0.3
4-3	32	32	32	32	30	31	0.0	0.4	0.2	212	212	212	208	209	210	0.6	0.4	0.3	546	545	544	540	542	542	0.6	0.3	0.2
6-2	32	32	32	30	29	30	0.4	0.6	0.4	212	212	212	208	209	209	0.6	0.4	0.4	540	540	543	536	537	544	0.4	0.3	-0.1
6-3	32	32	32	31	30	30	0.2	0.4	0.4	212	212	212	211	212	210	0.1	0.0	0.3	539	538	538	537	535	534	0.2	0.3	0.4
6-4	32	32	32	29	30	31	0.6	0.4	0.2	212	212	212	210	210	210	0.2	0.3	0.3	539	539	539	533	533	535	0.6	0.6	0.4
A6-5	32	32	32	30	31	31	0.4	0.2	0.2	212	212	212	213	213	212	-0.1	-0.1	0.0	538	539	539	535	535	535	0.3	0.4	0.4
A8-1	31	32	32	30	30	31	0.2	0.4	0.2	212	212	212	209	208	209	0.4	0.6	0.4	546	548	550	540	547	550	0.6	0.1	0.0
A8-2	32	32	32	31	31	31	0.2	0.2	0.2	212	212	212	211	212	210	0.1	0.0	0.3	540	539	540	536	536	536	0.4	0.3	0.4
A8-3	32	32	32	31	30	31	0.2	0.4	0.2	212	212	212	210	210	211	0.3	0.3	0.1	537	537	537	531	532	540	0.6	0.5	-0.3
10-1	32	32	32	32	31	31	0.0	0.2	0.2	212	212	212	211	212	209	0.1	0.0	0.4	537	535	536	534	535	534	0.3	0.0	0.2
M17-1	32	32	32	31	31	32	0.2	0.2	0.0	212	212	212	211	211	211	0.1	0.1	0.1	540	540	541	542	542	541	-0.2	-0.2	0.0
M17-2	32	32	32	32	33	33	0.0	-0.2	-0.2	212	212	212	212	211	210	0.0	0.1	0.3	541	539	539	539	539	540	0.2	0.0	-0.1
M17-3	32	32	32	31	32	31	0.2	0.0	0.2	212	212	212	211	211	212	0.1	0.1	0.0	543	545	545	544	546	547	-0.1	-0.1	-0.2
Inconel																											
10-2 Inc	32	32	32	34	34	34	-0.4	-0.4	-0.4	212	212	212	213	213	213	-0.1	-0.1	-0.1	540	539	538	539	537	538	0.1	0.2	0.0
6-1 Inc	32	32	32	36	36	36	-0.8	-0.8	-0.8	212	212	212	210	210	208	0.3	0.3	0.6	549	550	549	543	540	540	0.6	1.0	0.9
Loose Thermocouple																											
6-5	32	32	32	34	35	34	-0.4	-0.6	-0.4	212	212	212	210	211	211	0.3	0.1	0.1	537	540	536	537	538	537	0.0	0.2	-0.1
6-8	32	32	32	32	32	32	0.0	0.0	0.0	212	212	212	212	210	210	0.0	0.3	0.3	538	539	541	539	539	539	-0.1	0.0	0.2
7-1	32	32	32	34	35	35	-0.4	-0.6	-0.6	212	212	212	210	210	210	0.3	0.3	0.3	543	544	544	546	547	548	-0.3	-0.3	-0.4
8-3	32	32	32	32	33	32	0.0	-0.2	0.0	212	212	212	210	212	213	0.3	0.0	-0.1	548	546	545	543	544	543	0.5	0.2	0.2

Note: If absolute temperature values of the reference thermometer being calibrated and the stack temperature sensors agree within 1.5 percent at each of the three calibration points, no correction is needed.

Magnehelic Gauge Calibration Data

Range: 0 - 1.0"

Date: 5/1/2007 **Calibrated by:** BJ

BAROMETRIC PRESURE: 29.24 **Reference:** 0.0-10.0" Manometer

SYSTEM
LEAK CHECKS (Y/N): Y

POINT
LEAK CHECK (Y/N): Y

Magnahelic Box 4

Serial # R041109LM41

MAG	MAN R1	MAN R2	MAN R3	MEAN	MEAN/MAG
0.20	2.00	0.20	0.20	0.800	4.000
0.40	0.40	0.40	0.40	0.400	1.000
0.60	0.60	0.60	0.60	0.600	1.000
0.80	0.80	0.80	0.80	0.800	1.000
1.00	1.00	1.00	1.00	1.000	1.000

Correction Factor: 1.6000

APEX INSTRUMENTS METHOD 5 PRE-TEST CONSOLE CALIBRATION
USING CALIBRATED CRITICAL ORIFICES
5-POINT ENGLISH UNITS

Meter Console Information	
Console Model Number	522/MB04
Console Serial Number	40622
DGM Model Number	S110
DGM Serial Number	300230

Calibration Conditions			
Date	Time	8-May-07	8:15AM
Barometric Pressure		29.2	in Hg
Theoretical Critical Vacuum[1]		13.8	in Hg
Calibration Technician		BJ - Run #1	

Factors/Conversions		
Std Temp	528	°R
Std Press	29.92	in Hg
K_1	17.647	oR/in Hg

[1]For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.

[2]The Critical Orifice Coefficient, K', must be entered in English units, $(ft^3R^{1/2})/(in.Hg*min)$.

Calibration Data

Run Time	Metering Console					Critical Orifice				
Elapsed	DGM Orifice ΔH	Volume Initial	Volume Final	Outlet Temp Initial	Outlet Temp Final	Serial Number	Coefficient	Amb Temp Initial	Amb Temp Final	Actual Vacuum
(Θ)	(P_m)	(V_{mi})	(V_{mf})	(t_{mi})	(t_{mf})		K'	(t_{amb})	(t_{amb})	
min	in H_2O	cubic feet	cubic feet	°F	°F		see above2	°F	°F	in Hg
20.0	0.3	118.320	124.371	67	68	RN-40	0.2333	76	77	25
15.0	0.7	124.371	131.128	67	70	RN-48	0.3455	77	77	24
20.0	1.1	131.128	142.691	68	73	RN-55	0.4431	77	77	22
15.0	2.1	142.691	154.483	70	74	RN-63	0.6003	77	77	20
12.0	3.6	154.483	166.829	73	78	RN-73	0.7827	77	78	17

Results

Standardized Data				Dry Gas Meter				
				Calibration Factor		Flowrate	ΔH @	
Dry Gas Meter		Critical Orifice		Value	Variation	Std & Corr	0.75 SCFM	Variation
($V_{m(std)}$)	($Q_{m(std)}$)	($Vcr_{(std)}$)	($Q_{cr(std)}$)	(Y)	(ΔY)	($Q_{m(std)(corr)}$)	(ΔH@)	(ΔΔH@)
cubic feet	cfm	cubic feet	cfm			cfm	in H2O	
5.908	0.295	5.872	0.294	0.994	0.004	0.294	1.850	-0.119
6.588	0.439	6.519	0.435	0.990	0.000	0.435	1.979	0.010
11.243	0.562	11.148	0.557	0.991	0.002	0.557	1.943	-0.026
11.468	0.765	11.327	0.755	0.988	-0.002	0.755	2.027	0.057
11.979	0.998	11.809	0.984	0.986	-0.004	0.984	2.049	0.079
				0.990	Y Average		1.970	ΔH@ Average

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is +-0.02.

I certify that the above Dry Gas Meter was calibrated in accordance with USEPA Methods, CFR Title 40, Part 60, Appendix A-3, Method 5, 16.2.3

Signature _____ Date 5-8-07

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

6/14/2006

Horizon Air
996 Lawrence Dr Ste 108
Newbury Park, CA 91320
USA

Attention: DRF

Praxair Order No. **558202-00**
Customer Reference No.
Intended End User: **HORIZON AIR MEASUREMENTS**

Product Lot/Batch No. **109612303**
Praxair Part No. **NI CDOXP80-AS**

CERTIFICATE OF ANALYSIS
Primary Standard

Component	Requested Concentration	Certified Concentration	Analytical Principle	Analytical Accuracy
Carbon dioxide	**12 %**	**11.97 %**	**V**	**±1 %**
Oxygen	**20 %**	**20.05 %**	**V**	**±1 %**
Nitrogen	**balance**	**balance**		

Analytical Instruments: **Mettler~ID5~Gravimetric~Gravimetric**
Cylinder Style: **AS**
Cylinder Pressure @70F: **2000 psig**
Cylinder Volume: **151 ft3**
Valve Outlet Connection: **CGA-590**
Cylinder No(s). **CC 181295**
Comments: **VALUES NOT VALID BELOW 150 PSIG.**

Filling Method: **Gravimetric**
Date of Fill: **5/3/2006**
Expiration Date: **12/31/2009**

Analyst: **Ben Chen**

QA Reviewer: **Phu Tien Nguyen**

The gas calibration cylinder standard prepared by Praxair Distribution is considered a certified standard. It is prepared by gravimetric, volumetric, or partial pressure techniques. The calibration standard provided is certified against Praxair Reference Materials which are either prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

Note: All expressions for concentration (e.g., % or ppm) are for gas phase, by volume (e.g., ppmv) unless otherwise noted.

Key to Analytical Techniques:

A	Flame Ionization with Methanizer	B	Gas Chromatography with Discharge Ionization Detector	C	Gas Chromatography with Electrolytic Conductivity Detector	D	Gas Chromatography with Flame Ionization Detector
E	Gas Chromatography with Flame Photometric Detector	F	Gas Chromatography with Helium Ionization Detector	G	Gas Chromatography with Methanizer Carbonizer	H	Gas Chromatography with Photoionization Detector
I	Gas Chromatography with Reduction Gas Analyzer	J	Gas Chromatography with Thermal Conductivity Detector	K	Gas Chromatography with Ultrasonic Detector	L	Infrared - FTIR or NDIR
M	Mass Spectrometry - MS or GC/MS	N	Proprietary	O	Paramagnetic	P	Specific Water Analyzer
Q	Total Hydrocarbon Analyzer	R	Wet Chemical	S	Detector Tube	T	Odor
U	Chemiluminescence	V	Gravimetric	W	Electrolytic Cell/Electrochemical	X	Photoionization
Y	Pulsed Fluorescence	Z	UV Spectrometry				

PRAXAIR

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

CM

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER HORIZON AIR MEASUREMENTS **P.O NUMBER** 8685

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE GMIS	VS.srm#2029	CC 134870	24.83 ppm

ANALYZER READINGS

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

1. **COMPONENT** NITRIC OXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Thermo Env. 42C S/N 0518112467

ANALYTICAL PRINCIPLE Chemiluminescence **LAST CALIBRATION DATE** 8/24/05

FIRST ANALYSIS DATE 08/03/05 **SECOND ANALYSIS DATE** 09/15/05

Z 0.0	R 25.6	C 25.7	CONC. 24.9	Z 0.0	R 24.8	C 24.3	CONC. 24.3
R 25.9	Z 0.2	C 25.4	CONC. 24.3	R 24.8	Z 0.0	C 24.4	CONC. 24.4
Z 0.2	C 25.2	R 25.8	CONC. 24.5	Z 0.0	C 24.3	R 24.7	CONC. 24.4
U/M ppm		MEAN TEST ASSAY 24.6		U/M ppm		MEAN TEST ASSAY 24.4	

NOx value for reference only.
All values not valid below 150 psig.
First analysis was done on analyzer THERMO ENV.42H.

THIS CYLINDER NO. CC 87512
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 09/15/05
EXPIRATION DATE 09/15/07 **TERM** 24 MONTHS

CERTIFIED CONCENTRATION

NITRIC OXIDE	24.5 ppm
NITROGEN	BALANCE
NOx	24.6 ppm

ANALYZED BY HENRY KOUNG ***CERTIFIED BY*** JOSEPH CHARLES

PRAXAIR

EM STOCK

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

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER HORIZON AIR MEASUREMENTS **P.O NUMBER** 8512

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE GMIS	vsSRM#1684b	CC 136077	99.1 ppm
CARBON MONOXIDE GMIS	vs.SRM#1679	CC 160064	101.3 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** 01/03/05

FIRST ANALYSIS DATE 01/07/05 **SECOND ANALYSIS DATE** 01/14/05

Z 0.0	R 991.3	C 799.1	CONC. 79.9	Z 0.0	R 965.0	C 780.9	CONC. 80.2
R 992.5	Z 0.0	C 801.6	CONC. 80.0	R 966.0	Z 0.0	C 779.8	CONC. 80.0
Z 0.0	C 802.6	R 993.2	CONC. 80.1	Z 0.0	C 781.0	R 966.3	CONC. 80.1
U/M mV		MEAN TEST ASSAY 80.0		U/M mV		MEAN TEST ASSAY 80.1	

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

ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 01/03/05

FIRST ANALYSIS DATE 01/07/05 **SECOND ANALYSIS DATE** 01/14/05

Z 0.0	R 101.3	C 77.2	CONC. 77.2	Z 0.0	R 101.3	C 77.2	CONC. 77.2
R 101.3	Z 0.0	C 77.2	CONC. 77.2	R 101.3	Z 0.0	C 77.1	CONC. 77.1
Z 0.0	C 77.2	R 101.5	CONC. 77.0	Z 0.0	C 77.2	R 101.4	CONC. 77.1
U/M ppm		MEAN TEST ASSAY 77.1		U/M ppm		MEAN TEST ASSAY 77.1	

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

THIS CYLINDER NO. SA 15103
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 01/14/05
EXPIRATION DATE 01/14/07 **TERM** 24 MONTHS

CERTIFIED CONCENTRATION

NITRIC OXIDE	80.0 ppm
CARBON MONOXIDE	77.1 ppm
NITROGEN	BALANCE
NOx	81.1 ppm

ANALYZED BY MICHAEL TSANG *CERTIFIED BY* CHRIS VU

APPENDIX H - Correspondences

APPENDIX I - Permit to Operate

FACILITY PERMIT TO OPERATE
SUNSHINE CANYON LANDFILL

4. A SET OF FOUR SAMPLING PORTS SHALL BE INSTALLED IN THE FLARE SHROUD AND LOCATED AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL CONSIST OF A FOUR-INCH COUPLING WITH PLUG. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]

5. A SAMPLING PORT SHALL BE MAINTAINED AT THE INLET GAS LINE TO THE FLARE TO ALLOW LANDFILL GAS SAMPLING AND FLOW MEASUREMENT.
[RULE 217, 431.1, 1150.1]

6. THE FLARE SHALL BE EQUIPPED WITH A CONTINUOUS TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION. THE THERMOCOUPLE USED TO MEASURE THE TEMPERATURE SHALL BE AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER.
[RULE 1150.1, 1303 (a)(1)-BACT, 40CFR 60.756(b)(1)]

7. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1600 DEGREES F, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER, SHALL BE MAINTAINED IN THE FLARE STACK.
[RULE 1303 (a)(1)-BACT]

8. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE AQMD PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A SOURCE TEST IS CONDUCTED BY THE AQMD.
[RULE 217]

9. A SUFFICIENT NUMBER OF SIGHT GLASS WINDOWS SHALL BE MAINTAINED IN THE FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME WITHIN THE FLARE AT ALL TIMES. PERMANENT AND SAFE ACCESS SHALL BE PROVIDED FOR ALL SIGHT GLASS WINDOWS.
[RULE 217, 1303(a)(1)-BACT]

10. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE TO MEASURE AND RECORD THE GAS FLOW RATE (IN SCFM) TO THE FLARE AT LEAST EVERY FIFTEEN MINUTES AND SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.
[RULE 1150.1, 1303 (b)(2)-OFFSET, 40CFR 60.756(b)(2)(i)]

11. THE TOTAL VOLUME OF LANDFILL GAS BURNED IN THE FLARE SHALL NOT EXCEED 4,167 STANDARD CUBIC FEET PER MINUTE.
[RULE 1303 (b)(2)-OFFSET]

SOUTH C.,.ST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

FACILITY PERMIT TO OPERATE
SUNSHINE CANYON LANDFILL

15. A PRESSURE SENSING DEVICE WITH AN AUTOMATIC BLOWER SHUT OFF SYSTEM SHALL BE MAINTAINED IN THE BLOWER DISCHARGE LINE TO DETECT PRESSURE DROP DUE TO LANDFILL GAS LEAKS AND SHALL BE TESTED EVERY SIX MONTHS FOR PROPER OPERATION AND THE RESULTS RECORDED.
[RULE 1303 (a)(1)-BACT]

16. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE PARTICULATE FILTER.
[RULE 1303 (a)(1)-BACT]

17. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE FLAME ARRESTOR.
[RULE 1303 (a)(1)-BACT]

18. THE HEAT RELEASE OF LANDFILL GAS BURNED IN THIS FLARE SHALL NOT EXCEED 105 MILLION BTU/HR.
[RULE 1303 (b)(2)-OFFSET]

19. LANDFILL GAS ENTERING THE FLARE SHALL BE ANALYZED WEEKLY FOR HEATING VALUE AND METHANE CONCENTRATION. RESULTS SHALL BE RECORDED AND PROVIDED TO THE AQMD UPON REQUEST.
[RULE 1303 (b)(2)- OFFSET]

20. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)- OFFSET]

21. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO THE AQMD UPON REQUEST. A RECORD OF THE HOURS OF FLARE OPERATION SHALL BE INCLUDED.
[RULE 1150.1, 1303 (b)(2)- OFFSET]

22. ANY BREAKDOWN OR MALFUNCTION OF THE LANDFILL GAS FLARE SYSTEM RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WITHIN ONE HOUR AFTER OCCURRENCE, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]

23. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 204]