

NC Division of Waste Management - Solid Waste Section

Landfill Gas Monitoring Data Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Facility Name: Cabarrus County C&D Landfill Permit Number: 13-02

Date of Sampling: 3-12-14 NC Landfill Rule (.0500 or .1600): \_\_\_\_\_

Name and Position of Sample Collector: Randall Foster Landfill Manager

Type and Serial Number of Gas Meter: Coem 2000 - 15685 Calibration Date of Gas Meter: \_\_\_\_\_

Date and Time of Field Calibration: \_\_\_\_\_

Type of Field Calibration Gas (15/15 or 35/50): \_\_\_\_\_ Expiration Date of Field Calibration Gas Canister: \_\_\_\_\_

Pump Rate of Gas Meter: \_\_\_\_\_

Ambient Air Temperature: 34° Barometric Pressure: \_\_\_\_\_ General Weather Conditions: Sunny

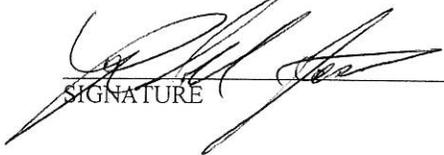
Instructions: Under "Location or LFG Well" identify the monitoring wells or describe the location for other tests (e.g., inside buildings). A drawing showing the location of test must be attached. Report methane readings in both % LEL and % methane by volume. A reading in percent methane by volume can be converted to % LEL as follows: % methane by volume = % LEL/20

Location or LFG Well ID	Sample Tube Purge	Time	Time Pumped (s)	Initial %LEL	Stabilized %LEL	%CH4 by Volume	%O2	%CO2	Notes
Scale House	30sec	8:00	30sec	0	0	0	21.1	0.01	H 25
Shop	30sec	8:05	30sec	0	0	0	21.6	0.01	
Recycle	30sec	8:08	30sec	0	0	0	20.8	0.01	
Electrode	30sec	8:10	30sec	0	0	0	21.0	0.00	
MBW 1	30sec	8:15	30sec	0	0	0	20.8	0.01	
2	30sec	9:35	30sec	0	0	0	20.7	0.01	
3	30sec	9:23	2 min.	95%	80%	3.8	3.5	18.8	
4	30sec	9:45	30sec	0	0	0	20.7	0.01	
5	30sec	9:50	30sec	0	0	0	20.5	0.03	
6	30sec	9:55	30sec	0	0	0	20.7	0.01	

If your facility has more gas monitoring locations than there is room on this form, please attach additional sheets listing the same information as contained on this form.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

  
SIGNATURE

  
TITLE

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Ambient Air Temperature: \_\_\_\_\_ Barometric Pressure: \_\_\_\_\_ General Weather Conditions: \_\_\_\_\_

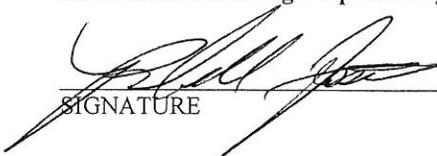
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Location or LFG Well ID	Sample Tube Purge	Time	Time Pumped (s)	Initial %LEL	Stabilized %LEL	%CH <sub>4</sub> by Volume	%O <sub>2</sub>	%CO <sub>2</sub>	Notes
7	30sec	10:05	30sec	0	0	0	20.6	0.02	H25
8	30sec	10:13	30sec	0	0	0	20.8	0.01	
9	30sec	10:18	30sec	0	0	0	20.6	0.02	
10	30sec	10:25	30sec	0	0	0	20.9	0.01	
11	30sec	10:35	30sec	0	0	0	20.4	0.03	
12	30sec	8:43	30sec	0	0	0	20.9	0.01	
13	30sec	8:40	30sec	0	0	0	20.4	0.05	
14	30sec	8:35	30sec	0	0	0	20.9	0.00	
15	30sec	8:28	30sec	0	0	0	20.8	0.01	
16	30sec	10:45	30sec	0	0	0	20.4	0.05	

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# INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

8411 Garvey Drive, Suite 113  
Raleigh, NC 27614  
Toll-free: (866) 646-PINE (7463)

## Pine Environmental Services, Inc.

**Instrument ID** 15685  
**Description** Gem 2000+  
**Calibrated** 3/11/2014 3:09:48PM

<b>Manufacturer</b> CES Landtec	<b>State Certified</b>
<b>Model Number</b> GEM2000+	<b>Status</b> Pass
<b>Serial Number/ Lot Number</b> GM12269/10	<b>Temp °C</b> 22.8
<b>Location</b> North Carolina	<b>Humidity %</b> 29.0
<b>Department</b>	

### Calibration Specifications

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>Fnd As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
<b>Group # 1</b> <b>Group Name</b> Methane <b>Stated Accy</b> Pct of Reading				<b>Range Acc %</b> 0.0000 <b>Reading Acc %</b> 3.0000 <b>Plus/Minus</b> 0.00			
50.00 / 50.00	%Volume	50.00	%Volume	50.00	50.00	0.00%	Pass
<b>Group # 2</b> <b>Group Name</b> Carbon Dioxide <b>Stated Accy</b> Pct of Reading				<b>Range Acc %</b> 0.0000 <b>Reading Acc %</b> 3.0000 <b>Plus/Minus</b> 0.00			
35.00 / 35.00	%Volume	35.00	%Volume	35.00	35.00	0.00%	Pass
<b>Group # 3</b> <b>Group Name</b> Oxygen <b>Stated Accy</b> Pct of Reading				<b>Range Acc %</b> 0.0000 <b>Reading Acc %</b> 3.0000 <b>Plus/Minus</b> 0.00			
20.90 / 20.90	%Volume	20.90	%Volume	20.90	20.90	0.00%	Pass
<b>Group # 4</b> <b>Group Name</b> Carbon Monoxide <b>Stated Accy</b> Pct of Reading				<b>Range Acc %</b> 0.0000 <b>Reading Acc %</b> 3.0000 <b>Plus/Minus</b> 0.00			
50.00 / 50.00	PPM	50.00	PPM	50.00	50.00	0.00%	Pass
<b>Group # 5</b> <b>Group Name</b> Hydrogen Sulfide <b>Stated Accy</b> Pct of Reading				<b>Range Acc %</b> 0.0000 <b>Reading Acc %</b> 3.0000 <b>Plus/Minus</b> 0.00			
25.00 / 25.00	PPM	25.00	PPM	25.00	25.00	0.00%	Pass

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**Description** Gem 2000+  
**Calibrated** 3/11/2014 3:09:48PM

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date/ Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
NC 4 GAS 50-50-25-20.9 EXP 5/14	NC 4 GAS MIX LOT IAM-412-15	Airgas	GP 12089	CAN-412-13		5/23/2014
NC 50/35 CO2 LOT 1027FB12 11/16	NC 50 CH4/35 CO2	American Gas Group	GP 12126			11/30/2016

### Notes about this calibration

**Calibration Result** Calibration Successful  
**Who Calibrated** John Paul Keon

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

**Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment  
Please call 866-960-7463 for Technical Assistance**