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July 8, 2010
Project No. 02208324.02

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Mark Wejkszner
Air Quality Program Manager
Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18711-0790

Subject: Compliance Monitoring Report
Period Covered: Project Startup to May 31, 2010
UGI Energy Services - Broad Mountain Landfill Gas to Energy Project

Mr. Wejlszner:

On behalf of UGI Energy Services, SCS Engineers is providing the enclosed compliance monitoring report for UGI's Broad Mountain Landfill Gas Energy Project (Project) at the Commonwealth Environmental Systems (CES) Landfill (Landfill) in Foster Township, Pennsylvania. This report covers the period from project startup to May 31, 2010.

The Project, which consists of two landfill gas (LFG)-fired turbines that generate renewable energy and a small utility flare to control off-gas from an LFG treatment system, currently operates under Pennsylvania Department of Environmental Protection (PADEP) Permit 54-322-008 for the utility flare and PADEP Permit 54-328-002GP-22 for LFG-fired turbines.

The Project submitted a application for a Federal Air Operating (Part 70) Permit, as required by Title V of the 1990 Clean Air Act Amendments and 25 Pa. Code 127 –"Air Quality Plan Approval/Operating Permits," to PADEP on August 11, 2009. The Project has not yet been issued a final Title V Operating Permit by PADEP; therefore, the separate permits for the flare and turbines remain in effect. Given that the reporting requirements for the Project are not yet streamlined, UGI and SCS have developed the attached consolidated compliance monitoring report to address the reporting requirements of both the turbines and flare.

The Director of Air Protection Division, EPA Region III, is included in this submission per Condition 14b of the Project's turbine permit.

If you have any questions regarding this compliance report, please do not hesitate to contact Gary Laird of UGI at 610-373-7999 or the undersigned at 828-285-8951.

Sincerely,

Chad Leatherwood, P.E.
Project Manager
SCS ENGINEERS

David S. Greene, P.E.
Senior Project Professional
SCS ENGINEERS

cc: Gary Laird, UGI Energy Services
Diana Esher, Director, Air Protection Division, EPA Region

SCS ENGINEERS

Compliance Monitoring Report

Broad Mountain Landfill Gas Energy Project

Presented to:

Pennsylvania Department of Environmental Protection
Bureau of Air Quality
Northeast Regional Office
2 Public Square
Wilkes-Barre, Pennsylvania 18711

Presented for:

UGI Development Co.

1 Meridian Boulevard
Wyomissing, Pennsylvania 19610

Presented by:

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June 30, 2010
File No.02208324.02

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Compliance Monitoring Report
Broad Mountain Landfill Gas Energy Project

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June 30, 2010
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1.0 INTRODUCTION

1.1 PURPOSE OF REPORT

UGI Development Company has prepared this Compliance Monitoring Report for its Broad Mountain Landfill-Gas-Energy (LFGE) project (the Project) at the Commonwealth Environmental Systems (CES) Landfill (the Landfill) in Foster Township, Pennsylvania. The project is located adjacent to the Landfill on property leased to UGI Development Company by CES. This report covers the period from project startup to May 31, 2010.

The Project currently operates until Pennsylvania Department of Environmental Protection (PADEP) Permit 54-322-008 for the utility flare and PADEP Permit 54-328-002GP-22 for LFG-fired turbines. The Project submitted a application for a Federal Air Operating (Part 70) Permit, as required by Title V of the 1990 Clean Air Act Amendments and 25 Pa. Code 127 –"Air Quality Plan Approval/Operating Permits," to PADEP August 11, 2009. The Project has not been issued a final Title V Operating Permit by PADEP; therefore, the separate permits for the flare and turbines remain in effect.

In addition to the submitted Title V application, the facility has developed and maintains a Startup, Shutdown, and Malfunction (SSM) Plan and a NOx Monitoring Plan for the Turbines.

The list of applicable documents for the site with respect to this report includes:

- Flare Plan Approval: 54-322-008
- Turbine Plan Approval: 54-328-002GP-22
- SSM Plan: "Startup, Shutdown, and Malfunction (SSM) Plan: UGI Development Co. Landfill Gas to Energy Project, Foster Township, Pennsylvania"
- NOx Monitoring Plan: "NOx Monitoring Plan"
- Title V Application: Submitted to PADEP August 11, 2009

1.2 FACILITY DESCRIPTION

The Project consists of two Solar Taurus simple cycle turbines fueled by landfill gas (LFG) from the Landfill to produce up to approximately 11 MW of electricity. The Project also incorporates a supplemental LFG treatment system to remove siloxanes contained in the LFG before it is combusted in the turbines and a utility flare control emissions from the treatment system when it undergoes a periodic purging.

Untreated LFG is purchased from the Landfill and routed to the Project. The untreated LFG is routed to a treatment system where is it compressed, filtered, and dewatered before it is used as a fuel in the two turbines. The treatment system incorporates two compression stages to provide LFG at 250 pounds per square inch for use in the turbines. The treatment systems also employ the use of two air-to-gas heat exchange systems to cool the gas after each compression stage, several filtration stages with a final coalescing filter rated at 0.5 microns, and multiple moisture knock-out vessels. After the LFG is filtered and dewatered, supplemental gas treatment may be

used to ensure proper fuel quality for the turbines through the removal of siloxanes. This siloxane removal system consists of adsorption chambers which are periodically purged. The purged off-gas is combined with LFG and routed to the small utility flare for control.

2.0 LANDFILL GAS-FIRED TURBINES

2.1 APPLICABLE REGULATIONS

The turbines (and associated LFG treatment systems) are subject to the following State and Federal Regulations:

- PADEP General Permit 22
- Turbine NSPS (40 CFR 60 subpart KKKK)
- Landfill NSPS (40 CFR 60 subpart WWW)
- Landfill NESHAP (40 CFR 63 subpart AAAA)

2.1.1 PADEP General Permit 22

In accordance with Section 6.1(f) of the Air Pollution Control Act, 35 P.S. 4006.1(f) and 25 Pa Code 127.514 and 127.611, PADEP issued General Plan Approval and/or General Operating Permit for LFG-fired simple cycle turbines (GP-22). GP-22 authorized construction, operation and modification of any LFG-fired turbine rated at 1,000 horsepower or 10.7 gigajoules per hour or greater. The General Permit serves as both a general plan approval and general operating permit for the LFG-fired turbines.

The General Permit authorizes the construction of LFG-fired turbines that meet BAT required under 25 Pa Code 127.1 and 127.12 (a)(5). Therefore, the LFG-fired turbines are subject to the following emissions limits contained in GP-22 for LFG-fired turbines:

- NO_X – 42 ppm_vd corrected to 15% oxygen
- CO – 100 ppm_vd corrected to 15% oxygen
- SO_2 – 30 ppm_vd corrected to 15% oxygen
- PM – 0.0232 lbs/MMBTU
- NMOC – 98% reduction by weight or 20 ppmvd (as hexane) corrected to 3% oxygen

A complete summary of stack testing and fuel sampling are provided in further sections. These summaries will demonstrate that the turbines have been operating in compliance with the requirements of the GP-22.

2.1.2 Stationary Combustion Turbine NSPS (40 CFR Subpart KKKK)

The project turbines are subject to the requirements of this turbine NSPS. This NSPS prescribes emission limitations for the turbines for NOx and SO_2. The applicable NOx limitation in the turbine NSPS is 74 ppmv, therefore, by meeting the PADEP-based BAT limitation of 42 ppmv, the turbines are in compliance with the NSPS limitation. The turbine NSPS also requires the

Project to develop and maintain a NOx monitoring plan. This plan has been developed for the Project and is maintained on-site. The NOx monitoring plan established operating parameters that the Project monitors to demonstrate compliance with the applicable NOx emission limitation. Based on consultation with the turbine manufacturer, the T5 combustion temperature has been determined to be the best operating parameter to demonstrate compliance with the NOx emission limitation as the turbines do not incorporate any post-combustion emission control and rely only on the design and proper operation of the combustion chamber to meet the NOx emission limitations. According to the NOx operating plan and demonstration during the July 2009 stack testing event, the Project monitors T5 temperature and maintains this temperature below 1,260 degrees F (on a four-hour rolling average) to demonstrate compliance with the NOx emission limitation. To date, the T5 temperature in either turbine has not exceeded 1,260 degrees F.

On May 19, 2009, the U.S. Environmental Protection Agency amended Subpart KKKK to change the SO_2 emission standard for units combusting at least 50 percent biogas (the definition of which includes LFG) to 0.15 lbs SO_2/MMBTU. To comply with this standard, sulfur testing of LFG is required per 40 CFR §60.4370 on the schedule noted in the Subpart. The sulfur testing sampling limit trigger of 0.15 lbs SO_2/MMBTU equates to 452 ppmv as shown below:

$$(0.15\ lbs\ SO_2/MMBTU)*(MMBTU/10^6\ BTU)*(500\ BTU/SCF\ LFG)*(32\ lb\ S/64\ lb\ SO_2)*(34\ lb\ H_2S/32\ lb\ S)*(1\ lbmol\ H_2S/34\ lb\ H_2S)*(385.1\ SCF\ H_2S/\ lbmol\ H_2S)*(10^6 SCF\ LFG) = 452\ ppm_v$$

A complete summary of NOx and SO_2 stack testing and fuel sampling are provided in further sections. These summaries will demonstrate that the turbines have been operating in compliance with the requirements of the turbine NSPS.

2.1.3 Landfill NSPS (40 CFR 60 Subpart WWW):

The CES Landfill is currently subject to the requirements of the Landfill NSPS. Therefore, LFG must be collected and controlled according to the requirements of that standard. Since the project receives untreated LFG from the landfill, the control requirements of the Landfill NSPS apply to the Project. However, on September 17, 2009, UGI submitted a request for determination to PADEP regarding the applicability of the Landfill NSPS's definition of treatment system to Project's treatment system since it compresses, filters, and dewaters the LFG before it is used as a fuel in the turbines. On November 18, 2009, PADEP issued a determination to UGI that indicated the treatment system does meet the definition of "treatment system" contained in the Landfill NSPS. Therefore, the turbines are not subject to the control requirements of the Landfill NSPS. However, UGI must maintain operation of the treatment system in its current configuration to retain this determination. UGI has maintained the operation of the treatment system in the configuration presented in the September 17, 2009 request for determination and is in compliance with the requirements of the Landfill NSPS.

2.1.4 Landfill NESHAP (40 CFR 63 Subpart AAAA)

Similar to Subpart WWW applicability described above, the CES Landfill is currently subject to the requirements of the Landfill NESHAP. Therefore, LFG must be collected and controlled according to the requirements of that standard. Since the Project receives untreated LFG from the

landfill, the control requirements of the Subpart will apply to the LFG received. As discussed above, PADEP has determined that the treatement system utilized by the Project meets the definition of "treatment system" contained in the Landfill NSPS. Therefore, the turbines are not subject to the control requirements of the Landfill NSPS. Accordingly, the requirements contained in the Landfill NESHAP do not apply to the turbines as long as the treatment system is operated in the configuration presented in the September 17, 2009 request for determination.

3.0 UTILITY FLARE

3.1 APPLICABLE REGULATIONS

The utility flare that is used to control the off-gas generated by the LFG treatment system is subject to the following State and Federal Regulations:

- PADEP BAT Requirements for Flares
- Landfill NSPS (40 CFR 60 subpart WWW)
- Landfill NESHAP (40 CFR 63 subpart AAAA)

The flare operates only when needed to combust gases produced during regeneration cycles of siloxane-removal system adsorber beds. Therefore, the flare frequently experiences start-up and shut-down events. After the siloxane system completes a regeneration cycle, the flare is shutdown.

3.1.1 PADEP BAT Requirements

PADEP has developed guidelines for municipal waste LFG extraction systems for control devices. These guidelines are in accordance with Best Available Technology (BAT) as established under 25 Pa Code 127.12 (a)(5) for municipal waste LFG extraction systems. The utility flare utilized by the Project complies with the applicable BAT requirements. Many of the BAT requirements are design related; however, the Project monitors flare temperature to demonstrate compliance with the 1,500 degrees F BAT requirement. A summary of flare combustion temperature deviations is provided in Appendix A. Per the description of each deviation, all were associated with start-up events and the minimum flare temperatures were achieved during normal operation.

3.1.2 Landfill NSPS (40 CFR 60 Subpart WWW)

As noted above, the landfill is subject to the requirements of the Landfill NSPS. Therefore, LFG must be collected and controlled according to the requirements of that standard. Since the Project receives untreated landfill gas, the Landfill NSPS is applicable. According to 60.752(b)(2)(ii)(C) of the Landfill NSPS, any emissions from a treatment system must be controlled to the requirements of 60.752(b)(2)(iii)(B). The utility flare operated at the Project was incorporated to meet this requirement. Based on the initial performance testing on the flare conducted in July 2009 and summarized in Section 3.0, the average flare temperature recorded during the performance testing was 1,575 degrees F. According to the Landfill NSPS (60.759(c)(1)(i)), the flare is operating in compliance as long as the average flare temperature is

more than 28 degrees C below the average temperature recorded during the performance test. This equates to a minimum operating temperature of 1,525 degrees F. A summary of flare combustion temperature deviations is provided in Appendix A. Per the description of each deviation, all except one, were associated with start-up events and the minimum flare temperatures were achieved during normal operation. The lone exception was a malfunction. This malfunction event involved replacement of the flare flame arrestor and was corrected consistent with the facility's SSM plan.

3.1.3 Landfill NESHAP (40 CFR 63 Subpart AAAA)

As noted above, the landfill is subject to the requirements of the Landfill NESHAP. Therefore, LFG must be collected and controlled according to the requirements of that standard. Since the gas treatment system receives untreated LFG and releases and off-gas, the standard applies to the flare that controls the off-gas from the treatment system. As discussed above, the Project has developed and follows a Start-up, Shut-down, and Malfunction (SSM) plan to minimize emissions during these periods. During each start-up activity identified in Appendix A, the facility followed its SSM plan to minimize emissions.

4.0 STACK TEST AND SAMPLING RESULTS

Initial Stack Testing

Per the requirements of the GP-22, Turbine NSPS, and the Landfill NSPS, the Project conducted initial stack testing on the turbines and flare in June 2009. A summary of stack test results are included in the Tables 1, 2, and 3 below. Detailed data from the stack test report is included in Appendix B (for the Flare) and Appendix C (for the Turbine A and B).

Table 1. Flare Stack Test Results

Test Date	Firing Rate (scfm of LFG)	Flare Combustion Temperature (°F)	NMOC (ppm_v as Hexane)
06/18/2009	118	1,579	1.7
06/18/2009	120	1,568	1.0
06/19/2009	102	1,580	6.1
Average		1,575	2.9
Applicable Limit		**≥1,525°F**	**<20**

Table 2. Turbine A Stack Test Results

Test Date	Firing Rate (scfm of LFG)	T5 Temperature (°F)	NMOC (ppm_v as Hexane at 3% O_2)	NOx (ppm_v at 15% O_2 dry)	CO (ppm_v at 15% O_2 dry)	SO2 (ppm_v at 15% O_2 dry)
06/16/2009	2,200	1,202	1.9	21.1	35.9	19.6
06/16/2009	2,200	1,211	1.6	21.7	33.6	19.0
06/16/2009	2,200	1,220	1.6	22.2	33.6	19.1
Average			1.7	21.7	34.4	19.2
Applicable Limit			**<20**	**<42.0**	**<100**	**<30**

Table 3. Turbine B Stack Test Results

Test Date	Firing Rate (scfm of LFG)	T5 Temperature (°F)	NMOC (ppm_v as Hexane at 3%O_2)	NOx (ppm_v at 15% O_2 dry)	CO (ppm_v at 15% O_2 dry)	SO2 (ppm_v at 15% O_2 dry)
06/17/2009	2,270	1,178	6.5	20.5	62.5	19.1
06/17/2009	2,270	1,202	4.5	21.3	51.6	19.9
06/17/2009	2,270	1,213	3.6	22.0	47.3	19.6
Average			4.9	21.3	53.8	19.5
Applicable Limit			**<20**	**<42.0**	**<100**	**<30**

As previously discussed, monitoring to ensure compliance with the NOx emissions limit for both Turbine A and B, consists of tracking the combustion chamber temperature, designated T5. The parameter and its limit are based upon the above stack testing, discussions with the turbine manufacturer, and knowledge of NOx formation. As detailed in the facility's NOx Monitoring Plan, a T5 limit temperature of no greater than 1,260 °F. The turbines are designed with operating systems that limit T5 temperature and automatically implement operational changes and/or shutdown procedures if T5 temperatures exceed 1,260°F.

4.1.1 Annual Turbine Stack Testing

Per the Condition 13.b.iv of GP-22, the turbines conducted an annual test for NOx and CO emission rates using portable equipment. This testing was conducted by Arrow Environmental Consulting on June 5, 2010 and demonstrated compliance with the applicable NOx and CO limitiations. A summary of these test results are provided in Table 4. The test report summary is provided in Appendix E.

Table 4. Annual NOx and CO Testing

Unit	Firing Rate avg of 3 runs (scfm of LFG)	NOx avg of 3 runs (ppmv @ 15% O_2)	CO avg of 3 runs (ppmv @ 15%O_2)
Turbine A	1941.7	17.7	87.0
Turbine B	1816.7	20.0	93.7
Applicable Limit		**<42.0**	**<100**

4.1.2 Site Sulfur Sampling

Sulfur sampling data covering the period of the report is provided in Appendix D.

The facility conducted Sulfur sampling per the NSPS Subpart KKKK sampling requirements noted above. Samples were taken downstream of the treatment system and prior to each of the two turbines (noted as Turbine A and Turbine B). Daily sampling began March 23, 2009, and as required, continued for 30 days. No exceedances of the 450 ppm_v standard were measured. Sampling results are shown in Table 5.

Table 5. Sulfur Content Daily Sampling (March 23-April 21, 2009)

Sampling Frequency: Daily Sampling for 30 days		
	Turbine A	Turbine B
Average Concentration	135 ppm_v	139 ppm_v
Maximum Concentration	290 ppm_v	310 ppm_v

No concentrations were detected above the standard, although a portion of the samples showed concentrations at levels greater than half of the standard. Because some of these results were above one-half of the standard, the frequency of the subsequent round of sampling was reduced to every 30 days for three months as allowed in §60.4370. No concentrations above the standard were measured in this subsequent round of sampling. Sampling results from these periods are shown in Table 6.

Table 6. Sulfur Content Monthly Sampling (May, June, July 2009)

Sampling Frequency: Every 30 days for three months		
	Turbine A	Turbine B
May 18, 2009	110 ppm_v	NOT IN OPERATION
June 16, 2009	380 ppm_v	370 ppm_v
July 16, 2009	190 ppm_v	310 ppm_v

Since these monthly sampling results showed not concentrations above the 450 ppm_v threshold, sampling frequency was reduced to semi-annually in accordance with §60.4370. Following the July sampling, the next sampling occurred January 2010.

Analytical results of the January 2010 semi-annual sampling are provided in Table 7.

Table 7. Sulfur Content Semi-Annual Sampling (January 2010)

Sampling Frequency: Every Six Months		
	Turbine A	Turbine B
January 27, 2010	350 ppm_v	530 ppm_v

As shown in the Table 7, the sulfur concentration measured at Turbine B exceeded the 450 ppm_v standard on January 27, 2010. This value is usually high compared to the historical sampling of nearly one year. When the Project became aware of the exceedance (after sampling, shipment of the sample, analysis, and receipt of the analytical report), UGI began contractual procedures to procure contracting services to re-institute daily sulfur sampling per the sampling schedule requirements of the Turbine NSPS.

Daily sampling began on March 2, 2010. As shown in Table 8, the sampling revealed usually high sulfur levels and the turbines were promptly shutdown (and sampling truncated) since corrective measures were not effective. Given that the oxidation of sulfur contained in the LFG is not dependent upon combustion device, the shutdown of the turbines and routing of the LFG to the flares operated by the CES landfill does not result in a reduction of SO_2 emissions from the local area.

Table 8. Sulfur Content Daily Sampling (March 2-10, 2010)

Sampling Frequency: Daily Sampling for 9 days		
	Turbine A	Turbine B
Average Concentration	NOT IN OPERATION	766 ppm_v
Maximum Concentration		860 ppm_v

Upon confirmation of these elevated fuel sulfur concentrations, the Project self-reported to PADEP and shutdown the turbines for a period of 14 days. UGI worked closely with the Landfill and their environmental consultants to identify the source within the landfill of the high-sulfur LFG, isolate the source, and pursue corrective actions. The Landfill isolated the wellfield collectors identified with high sulfur concentrations to avoid routing of high-sulfur LFG to the turbines. To resolve the issue on a long-term basis, UGI and CES are currently investing capital in a gas system expansion project to allow flexibility when making wellfield adjustments to prevent recurrence of the issue. UGI demonstrated commitment to meeting the environmental requirements of the Turbine NSPS through its 14-day shutdown of the Project, which resulted in lost revenue. UGI and CES are making capital improvement to ensure compliance with the fuel sulfur limitations.

The Project did not resume operation until it was confident the the issue was correctly identified and resolved. Upon start-up on March 26, 2010, the facility initiated daily sampling for 30 days.

Table 9. Sulfur Content Daily Sampling (3/26/10-4/26/10)

Sampling Frequency: Daily Sampling for 30 days		
	Turbine A	Turbine B
Average Concentration	316 ppm_v	330 ppm_v
Maximum Concentration	420 ppm_v (excluding malfunction on 4/9/10)	380 ppm_v

All concentration data from this period is below the standard, except for one day where there was a malfunction in the gas collection system at the Landfill. A malfunction occurred on the LFG collection system at the Landfill on April 9, 2010, which resulted in an above-standard fuel sulfur concentration of 480ppm_v. This high reading is an anomaly due to a temporary shutdown of the Landfill flare which resulted in routing of higher-sulfur LFG to the turbines. The malfunction at the Landfill was corrected immediately as demonstrated by fuel sulfur sampling results on April 10. Sampling after April 9 show consistent fuel sulfur concentrations below the standard. Following the daily sampling in the March –April period, the site reduced sampling frequency to every 30 days, and sampled again on May 21, 2010. The results of this sampling are shown on Table 9 and demonstrate fuel sulfur concentrations below the applicable limitation.

To maintain high environmental performance, the Project performs weekly fuel sulfur sampling using a portable Dragger tube colorimetric analysis. This "beyond the permit" sampling assists UGI in monitoring sulfur level until the gas system expansion is completed.

APPENDIX A

SUMMARY OF FLARE TEMPERATURE DEVIATIONS

UGI Co - Broad Mtn LFGE Facility
Flare Temperature Data
Exemptions List (periods dropping 3-hr block avg below 1525° F)

EVENT DATE & TIME	3-hour Block Average Temperature	ISSUE	Reason
5/21/2009 0:00	1,455	3-hour Block Average Temperature Below 1,525	Start-up
5/23/2009 9:00	1,457	3-hour Block Average Temperature Below 1,525	Start-up
5/28/2009 15:00	1,306	3-hour Block Average Temperature Below 1,525	Start-up
5/30/2009 18:00	1,490	3-hour Block Average Temperature Below 1,525	Start-up
6/1/2009 15:00	1,198	3-hour Block Average Temperature Below 1,525	Start-up
6/2/2009 15:00	1,116	3-hour Block Average Temperature Below 1,525	Start-up
6/8/2009 18:00	1,469	3-hour Block Average Temperature Below 1,525	Start-up
6/23/2009 15:00	1,473	3-hour Block Average Temperature Below 1,525	Start-up
6/27/2000 0:00	1,438	3-hour Block Average Temperature Below 1,525	Start-up
7/1/2009 18:00	1,504	3-hour Block Average Temperature Below 1,525	Start-up
7/2/2009 18:00	1,479	3-hour Block Average Temperature Below 1,525	Start-up
7/3/2009 15:00	97	3-hour Block Average Temperature Below 1,525	Start-up
7/5/2009 15:00	1,036	3-hour Block Average Temperature Below 1,525	Start-up
7/12/2009 18:00	1,279	3-hour Block Average Temperature Below 1,525	Start-up
7/14/2009 18:00	1,444	3-hour Block Average Temperature Below 1,525	Start-up
7/22/2009 21:00	1,503	3-hour Block Average Temperature Below 1,525	Start-up
7/24/2009 21:00	1,492	3-hour Block Average Temperature Below 1,525	Start-up
7/25/2009 18:00	956	3-hour Block Average Temperature Below 1,525	Start-up
7/27/2009 0:00	1,216	3-hour Block Average Temperature Below 1,525	Start-up
7/28/2009 21:00	1,520	3-hour Block Average Temperature Below 1,525	Start-up
8/3/2009 18:00	1,062	3-hour Block Average Temperature Below 1,525	Start-up
8/7/2009 18:00	1,495	3-hour Block Average Temperature Below 1,525	Start-up
8/14/2009 18:00	1,507	3-hour Block Average Temperature Below 1,525	Start-up
8/24/2009 15:00	1,029	3-hour Block Average Temperature Below 1,525	Start-up
8/31/2009 3:00	1,448	3-hour Block Average Temperature Below 1,525	Start-up
9/16/2009 18:00	1,435	3-hour Block Average Temperature Below 1,525	Start-up
9/18/2009 18:00	1,420	3-hour Block Average Temperature Below 1,525	Start-up
9/21/2009 0:00	1,388	3-hour Block Average Temperature Below 1,525	Start-up
9/22/2009 18:00	1,498	3-hour Block Average Temperature Below 1,525	Start-up
9/23/2009 18:00	1,425	3-hour Block Average Temperature Below 1,525	Start-up
9/24/2009 18:00	1,450	3-hour Block Average Temperature Below 1,525	Start-up
9/28/2009 12:00	1,288	3-hour Block Average Temperature Below 1,525	Start-up
9/29/2009 18:00	1,466	3-hour Block Average Temperature Below 1,525	Start-up
11/8/2009 12:00	74	3-hour Block Average Temperature Below 1,525	Start-up
11/8/2009 18:00	1,310	3-hour Block Average Temperature Below 1,525	Start-up
11/9/2009 15:00	906	3-hour Block Average Temperature Below 1,525	Start-up
11/9/2009 18:00	1,064	3-hour Block Average Temperature Below 1,525	Start-up
11/11/2009 18:00	725	3-hour Block Average Temperature Below 1,525	Start-up
11/12/2009 18:00	69	3-hour Block Average Temperature Below 1,525	Start-up
11/13/2009 12:00	1,444	3-hour Block Average Temperature Below 1,525	Start-up
12/2/2009 15:00	988	3-hour Block Average Temperature Below 1,525	Start-up
12/3/2009 9:00	1,162	3-hour Block Average Temperature Below 1,525	Start-up
12/25/2009 15:00	555	3-hour Block Average Temperature Below 1,525	Start-up
12/31/2009 9:00	1,509	3-hour Block Average Temperature Below 1,525. Faulty flame arrestor was replaced.	Malfunction
1/2/2010 9:00	15	3-hour Block Average Temperature Below 1,525	Start-up
1/3/2010 18:00	1,494	3-hour Block Average Temperature Below 1,525	Start-up
1/11/2010 15:00	1,419	3-hour Block Average Temperature Below 1,525	Start-up
1/12/2010 12:00	1,398	3-hour Block Average Temperature Below 1,525	Malfunction
1/13/2010 9:00	1,454	3-hour Block Average Temperature Below 1,525	Malfunction
1/21/2010 9:00	1,473	3-hour Block Average Temperature Below 1,525	Start-up
1/24/2010 9:00	1,234	3-hour Block Average Temperature Below 1,525	Start-up
1/26/2010 3:00	1,506	3-hour Block Average Temperature Below 1,525	Start-up
2/1/2010 12:00	65	3-hour Block Average Temperature Below 1,525	Start-up
2/9/2010 3:00	1,297	3-hour Block Average Temperature Below 1,525	Start-up
2/16/2010 15:00	1,336	3-hour Block Average Temperature Below 1,525	Malfunction
2/17/2010 12:00	1,399	3-hour Block Average Temperature Below 1,525	Shutdown/Startup
3/31/2010 15:00	1,472	3-hour Block Average Temperature Below 1,525	Start-up
4/13/2010 9:00	1,471	3-hour Block Average Temperature Below 1,525	Start-up
4/14/2010 9:00	992	3-hour Block Average Temperature Below 1,525	Start-up

APPENDIX B

INITIAL STACK TESTING-FLARE

COMPLIANCE TEST REPORT FOR THE

ENCLOSED GROUND FLARE
UGI DEVELOPMENT CORP.
COMMONWEALTH ENVIRONMENTAL SERVICES LANDFILL
44 COMMONWEALTH ROAD
HEGINS, PENNSYLVANIA

FLARE PLAN APPROVAL NO. 54-322-008

Prepared for

Energenic LLC
5429 Harding Way, Suite 500
Mays Landing, NJ 08330
Attn: Brian Leary

Prepared for Submittal to

PA. Department of Environmental Protection

Source Test Section
P.O. Box 8468
Harrisburg, PA 17105-8468

and the

Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18711-0790

Test Dates:
June 18 & 19, 2009

Report Date:
July 14, 2009

Arrow Environmental Consulting, LLC PO Box 3658 Easton PA 18043 Phone: (610) 597-1770
andrewmcneel@rcn.com Fax: (610) 258-2470

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4.0 STACK CONDITIONS 4

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APPENDICES

I EMISSION CALCULATION SHEETS
II FIELD DATA SHEETS
III PROCESS DATA
IV CALIBRATION DATA
V CORRESPONDENCE AND PROTOCOL

1.0 INTRODUCTION

Arrow Environmental Consulting, LLC (Arrow) completed compliance emission testing at UGI Development Corp.'s (UGI) facility located at the Commonwealth Environmental Services Landfill in Hegins, Pennsylvania. One shrouded enclosed ground flare used to combust LFG and treatment system off-gases was tested. Treatment off-gases were combusted during the compliance testing. The tests were completed on June 18 and 19, 2009.

Emissions of total hydrocarbons (THC as CH_4) and methane (CH_4) were measured. A total of four (4) test runs were completed for total hydrocarbons and methane. Three runs for opacity were completed. The test results are summarized in Table 1. In addition to the individual run results, the allowable emission rates are also presented.

Three test runs were completed as scheduled on June 18. After reviewing the results for run 3, it was observed that the non-methane hydrocarbon value was a negative value. While this is not an uncommon occurrence (for non-methane hydrocarbons via RMs 25A and 18 to be less than zero), the facility elected to complete an additional run. The fourth run for non-methane hydrocarbons was completed the following morning, June 19. The results of all runs are presented in Table 1.

Opacity was observed at 15 second intervals. The observations were completed by a currently-certified reader. The field data sheets are in Appendix II and the reader's certificate is in Appendix IV.

A copy of the correspondence associated with protocol development for testing and the scheduled test dates is contained in Appendix V. Process data, including landfill gas composition, are presented in Appendix III. All calculations are presented in Appendix I. All field data are contained in Appendix II. Calibration data, including certificates for all calibration gas standards, are in Appendix IV.

A 3-point gaseous stratification check was performed per US EPA Reference Method 7E. This was performed prior to the start of the first test run. The results of the check indicated non-stratification of the O_2 gaseous parameter as defined by the reference method. Therefore, single point sampling was performed for all gaseous test runs. Results of the initial stratification check are summarized in Appendix I.

2.0 PERSONNEL AND CERTIFICATIONS

2.1 PADEP Personnel

Testing was not observed by any regulatory personnel.

2.2 Testing Firm Certifications

The emissions testing was conducted on June 18 and 19, 2009 by John M. Collette, Michael A. Walters, and Brian E. Cleary of Arrow Environmental Consulting, LLC.

I certify that I have personally examined and am familiar with the information developed or received by Arrow personnel in this report and, to the best of my knowledge, this information is true, accurate, and complete.

Andrew W. McNeel
Managing Member
Arrow Environmental Consulting, LLC

George H. Wagner II, CIH
Certified Industrial Hygienist
CIH #5643

2.3 Statement of Knowledge

To the best of our knowledge, the information contained herein has been checked for completeness, and the results presented are accurate, error-free, legible and representative of the actual emissions measured during testing.

Test Team On-site Supervisor and Project Manager

John M. Collette
Name

John M. Collette
Signature

7-13-09
Date

Source Representative

Name

Signature

Date

3.0 SUMMARY OF RESULTS

Table 1: Flare Firing Landfill Gas and Treatment System Off-Gas

RUN	1	2	3	4 [1]	ALLOWABLE
DATE	06/18/09	06/18/09	06/18/09	06/19/09	---
TIME	1249-1349	1410-1510	1526-1626	0815-0915	---
Firing Rate (scfm) [2]	118	120	117	102	---
HEAT INPUT (LHV mmBtu/hr)	3.2	3.3	3.2	2.8	N/A
FLARE COMBUSTION TEMPERATURE. (°F)	1,579	1,568	1,570	1,580	≥ 1,500
TOTAL HYDROCARBONS as Methane via RM 25A					
PPMV as METHANE (dry)	27.8	32.5	85.8	141.4	N/A
METHANE via RM 18					
PPMV (dry)	22.4	29.4	125.8	124.3	N/A
NON-METHANE ORGANIC COMPOUNDS (RM 25A less RM 18)					
PPMV as METHANE (dry)	5.4	3.1	-40.1	17.1	N/A
PPMV as HEXANE @ 3% O_2	1.7	1.0	-12.7	6.1	< 20
OPACITY					
AVERAGE (% opacity)	0	0	0	N/A	See [3] below.
MAXIMUM OBSERVED (% opacity @ 15 sec. intervals)	0	0	0	N/A	See [3] below.

[1] A fourth run for hydrocarbons was completed due to the negative results obtained for the third run. Additional opacity observations were not completed.

[2] The flare combusted LFG treatment off-gas from Train A for runs 1, 2, and 3 and from Train B for Run 4.

[3] Opacity allowable is: 0% for no less than 115 minutes in any two hour period; < 20% for not less than 57 minutes in any hour; and < 60% at all times.

APPENDIX C

INITIAL STACK TESTING-TURBINES

COMPLIANCE TEST REPORT FOR

COMBUSTION TURBINES
UGI DEVELOPMENT CORP.
COMMONWEALTH ENVIRONMENTAL SERVICES LANDFILL
44 COMMONWEALTH ROAD
HEGINS, PENNSYLVANIA

TURBINES PERMIT NO. 54-328-002GP22

Prepared for

Energenic LLC
5429 Harding Way, Suite 500
Mays Landing, NJ 08330
Attn: Brian Leary

Prepared for Submittal to

PA. Department of Environmental Protection

Source Test Section
P.O. Box 8468
Harrisburg, PA 17105-8468

and the

Northeast Regional Office
2 Public Square
Wilkes-Barre, PA 18711-0790

Test Dates:
June 16 & 17, 2009

Report Date:
July 14, 2009

Arrow Environmental Consulting, LLC PO Box 3658 Easton PA 18043 andrewmcneel@rcn.com Phone: (610) 597-1770 Fax: (610) 258-2470

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V PROTOCOL AND CORRESPONDENCE
VI LABORATORY DATA

3.0 SUMMARY OF RESULTS

Table 1: Turbine A at T5 Firing Landfill Gas

RUN	1	2	3	ALLOWABLE
DATE	06/16/09	06/16/09	06/16/09	---
TIME	0900-1000	1032-1132	1205-1305	---
LFG FIRING RATE (scfm)	2,220	2,220	2,220	N/A
LFG METHANE CONTENT (%)	50.3	50.8	50.8	N/A
HEAT INPUT (LHV mmBtu/hr)	60.6	60.5	60.6	60.76
MEGAWATT	4.87	4.92	4.97	5.5
T5 TEMPERATURE (°F)	1,202	1,211	1,220	N/A
NITROGEN OXIDES (as NO_2) via RM 7E				
PPMV (dry)	21.3	22.1	22.7	N/A
PPMV @ 15% O_2 (dry)	21.1	21.7	22.2	42.0
CARBON MONOXIDE via RM 10				
PPMV (dry)	36.3	34.2	34.4	N/A
PPMV @ 15% O_2 (dry)	35.9	33.6	33.6	100
NON METHANE ORGANIC COMPOUNDS via RM 25A [1]				
PPMV as METHANE (dry)	3.8	3.3	3.2	N/A
PPMV as HEXANE @ 3% O_2	1.9	1.6	1.6	20 [1]
SULFUR DIOXIDE via RM 6C				
PPMV (dry)	19.9	19.3	19.5	N/A
PPMV @ 15% O_2 (dry)	19.6	19.0	19.1	30
POUNDS/MMBTU (HHV)	0.119	0.116	0.117	0.15
OPACITY via RM 9				
AVERAGE (% opacity)	0	0	0	< 10
MAXIMUM (% opacity)	0	0	0	< 10

[1] Permit limits are for Non Methane Organic Compounds (NMOC). The measurements were completed for total hydrocarbons via RM 25A (THC as methane) and demonstrated a reasonable margin of compliance for NMOC. The THC results are reported above for satisfying the NMOC requirements.

3.0 SUMMARY OF RESULTS (continued)

Table 2: Turbine B at T5 Firing Landfill Gas

RUN	1	2	3	ALLOWABLE
DATE	06/17/09	06/17/09	06/17/09	---
TIME	0900-1000	1047-1147	1234-1334	---
LFG FIRING RATE (scfm)	2,270	2,270	2,270	N/A
LFG METHANE CONTENT (%)	50.5	50.5	50.5	N/A
HEAT INPUT (LHV mmBtu/hr)	61.8	61.9	62.1	60.76
MEGAWATT	4.83	4.92	4.97	5.5
T5 TEMPERATURE (°F)	1,178	1,202	1,213	N/A
NITROGEN OXIDES (as NO_2) via RM 7E				
PPMV (dry)	20.3	21.7	22.6	N/A
PPMV @ 15% O_2 (dry)	20.5	21.3	22.0	42.0
CARBON MONOXIDE via RM 10				
PPMV (dry)	61.9	52.5	48.6	N/A
PPMV @ 15% O_2 (dry)	62.5	51.6	47.3	100
NON METHANE ORGANIC COMPOUNDS via RM 25A [1]				
PPMV as METHANE (dry)	12.7	9.1	7.4	N/A
PPMV as HEXANE @ 3% O_2	6.5	4.5	3.6	20 [1]
SULFUR DIOXIDE via RM 6C				
PPMV (dry)	18.8	20.2	20.1	N/A
PPMV @ 15% O_2 (dry)	19.1	19.9	19.6	30
POUNDS/MMBTU (HHV)	0.119	0.125	0.126	0.15
OPACITY via RM 9				
AVERAGE (% opacity)	0	0	0	< 10
MAXIMUM (% opacity)	0	0	0	< 10

[1] Permit limits are for Non Methane Organic Compounds (NMOC). The measurements were completed for total hydrocarbons via RM 25A (THC as methane) and demonstrated a reasonable margin of compliance for NMOC. The THC results are reported above for satisfying the NMOC requirements.

3.0 SUMMARY OF RESULTS (continued)

Table 3: HAPs Emissions for Turbine A at T5 Firing Landfill Gas

RUN	1	2	3	Allowable
DATE	06/16/09	06/16/09	06/16/09	---
TIME	0900-1000	1032-1132	1205-1305	---
MEGAWATT	4.87	4.92	4.97	5.5
T5 TEMPERATURE (°F)	1,202	1,211	1,220	N/A
HAPS – Pounds per Hour Emissions from Turbine A				
Chloromethane	0.0057	Not Detected	Not Detected	Not Specified
1,3 Butadiene	0.0034	Not Detected	Not Detected	Not Specified
Bromomethane	0.0009	Not Detected	Not Detected	Not Specified
Acetone	0.0105	Not Detected	Not Detected	Not Specified
Carbon Disulfide	0.0028	0.0043	Not Detected	Not Specified
Methyl Ethyl Ketone	0.0011	Not Detected	Not Detected	Not Specified
Tetrahydrofuran	0.0106	Not Detected	Not Detected	Not Specified
Benzene	0.0156	Not Detected	Not Detected	Not Specified
4-Methyl-2-pentanone	0.0011	Not Detected	Not Detected	Not Specified
Toluene	0.0024	Not Detected	Not Detected	Not Specified
Chlorobenzene	0.0034	Not Detected	Not Detected	Not Specified
Styrene	0.0009	Not Detected	Not Detected	Not Specified
Sum of Detected HAPs	0.0583	0.0043	Not Detected	Not Specified

3.0 SUMMARY OF RESULTS (continued)

Table 4: HAPs Emissions for Turbine B at T5 Firing Landfill Gas

RUN	1	2	3	Allowable
DATE	06/17/09	06/17/09	06/17/09	---
TIME	0900-1000	1047-1147	1234-1334	---
MEGAWATT	4.83	4.92	4.97	5.5
T5 TEMPERATURE (°F)	1,178	1,202	1,213	N/A
HAPS – Pounds per Hour Emissions from Turbine B				
Acetone	Not Detected	0.0024	0.0041	Not Specified
Methyl Ethyl Ketone	Not Detected	Not Detected	0.0062	Not Specified
Tetrahydrofuran	Not Detected	Not Detected	0.0010	Not Specified
Heptane	Not Detected	Not Detected	0.0010	Not Specified
Toluene	Not Detected	Not Detected	0.0124	Not Specified
Ethyl Benzene	Not Detected	Not Detected	0.0039	Not Specified
m.p-Xylene	Not Detected	Not Detected	0.0098	Not Specified
o-Xylene	Not Detected	Not Detected	0.0035	Not Specified
4-Ethyltoluene	Not Detected	Not Detected	0.0037	Not Specified
1,3,5- Trimethylbenzene	Not Detected	Not Detected	0.0017	Not Specified
1,2,4- Trimethylbenzene	Not Detected	Not Detected	0.0050	Not Specified
1,4 Dichlorobenzene	Not Detected	Not Detected	0.0022	Not Specified
Sum of Detected HAPs	Not Detected	0.0024	0.0382	Not Specified

4.0 STACK CONDITIONS

Table 5: Turbine A at T5 Firing Landfill Gas

RUN	1	2	3
DATE	06/16/09	06/16/09	06/16/09
TIME	0900-1000	1032-1132	1205-1305
STACK INSIDE DIAMETER (in)	44.6	44.6	44.6
STACK CROSS SECTION (sq ft)	10.86	10.86	10.86
BAROMETRIC PRESSURE ("Hg)	30.18	30.18	30.19
AVG. STACK TEMP (°F)	911	919	923
STACK PRESSURE ("H_2O-gage)	-3.3	-3.3	-3.1
MOISTURE (% vol)	6.6	6.5	6.5
O_2 (% vol)	14.9	14.9	14.9
CO_2 (% vol)	5.1	5.2	5.2
N_2 (% vol by difference)	80.0	79.9	79.9
AVG. ACTUAL VELOCITY (ft/sec)	170.4	171.5	171.8
ACTUAL FLOW RATE (acfm)	111,100	111,800	112,000
STD FLOW RATE (scfm)	43,000	43,000	43,000
DRY STD FLOW RATE (dscfm)	40,100	40,200	40,200
CYCLONIC FLOW CHECK	Done 6/15/09	14.9° average	32° max. observed

Standard Conditions are 70°F, 29.92 "Hg.

4.0 STACK CONDITIONS (continued)

Table 6: Turbine B at T5 Firing Landfill Gas

RUN	1	2	3
DATE	06/17/09	06/17/09	06/17/09
TIME	0900-1000	1047-1147	1234-1334
STACK INSIDE DIAMETER (in)	45.3	45.3	45.3
STACK CROSS SECTION (sq ft)	11.17	11.17	11.17
BAROMETRIC PRESSURE ("Hg)	30.22	30.20	30.19
AVG. STACK TEMP (°F)	889	909	921
STACK PRESSURE ("H_2O-gage)	-2.4	-3.4	-4.0
MOISTURE (% vol)	6.8	7.0	6.4
O_2 (% vol)	15.1	14.9	14.8
CO_2 (% vol)	5.0	5.1	5.2
N_2 (% vol by difference)	79.9	80.0	80.0
AVG. ACTUAL VELOCITY (ft/sec)	175.6	175.7	178.5
ACTUAL FLOW RATE (acfm)	117,600	117,700	119,600
STD FLOW RATE (scfm)	46,400	45,600	45,900
DRY STD FLOW RATE (dscfm)	43,300	42,400	42,900
CYCLONIC FLOW CHECK	Done 06/16/09	12.8° average	25° max. observed

Standard Conditions are 70°F, 29.92 "Hg.

APPENDIX D

FUEL SULFUR SAMPLING DATA-TURBINES

EARTHRES GROUP

EarthRes Group, Inc.
P. O. Box 468
Pipersville, PA 18947

TEL 215-766-1211
FAX 215-766-1245
www.earthres.com

ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Dan Treffinger	**From:**	Sam Dean
Company:	DCO Energy	**Date:**	5/28/09
Phone:	(609) 992-6188	**Pages:**	23 — *including* this page
Re:	**30-Day Sulfur Sampling Results**		

CONFIDENTIALITY — The information contained in this transmission is confidential and/or legally privileged. This transmission is intended only for the use of the recipient named above. If you have received this communication in error, please notify us immediately and we will arrange for return of the message at no cost to you.

Dear Dan,

Please find attached one (1) copy of the monitoring results for the 30-day sulfur sampling performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be mailed to your attention. A summary of the results is listed below.

A total of 44 samples were collected for total sulfur analysis during this project from March 23 to April 21, 2009. The samples were shipped to Atlantic Analytical Laboratory (AAL) and analyzed using ASTM Method D5504. Samples were only collected when gas trains were in operation. A total of 14 samples were collected on the discharge of the second stage compression unit on Train A. A maximum sulfur reading of 290-ppm was reported. A total of 25 samples were collected on the discharge of the second stage compression unit on Train B. A maximum sulfur reading of 280-ppm was reported. A total of 5 samples were collected on the 14" header piping at the inlet to the plant. A maximum sulfur reading of 390-ppm was reported. All samples taken were delivered to the lab and analyzed within the required maximum hold time.

The steel cylinders were used for weekend sample collection to meet the hold time requirements of the sampling method. Please note that the gas samples taken using steel cylinders yielded variable results, with much lower sulfur concentrations than gas samples taken using tedlar bags. ERG personnel followed sampling procedures provided by the laboratory (AAL) during collection of the samples.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

Samuel A. Dean
Project Manager
Landfill Gas Services

Attachments: 30-Day Sulfur Sampling Summary Table
Atlantic Analytical Laboratory Landfill Gas Analysis Reports

DCO Landfill Gas Pipeline
30-Day Sulfur Sampling Summary Table

Updated: 5/27/09

		Sulfur Content (ppm)		
Date	**Sample Type**	**Train A**	**Train B**	**Inlet**
3/23/09	Tedlar	280		320
3/24/09	Tedlar	290		
3/25/09	Tedlar	210		
3/26/09	Tedlar		280	
3/27/09	Canister		44	
3/28/09	Canister		110	
3/29/09	Canister		190	
3/30/09	Tedlar		240	280
3/31/09	Tedlar		110	
4/1/09	Tedlar		240	
4/2/09	Tedlar		200	
4/3/09	Canister		23	
4/4/09	Canister		98	
4/5/09	Canister		16	
4/6/09	Tedlar		260	390
4/7/09	Tedlar		310	
4/8/09	Tedlar		240	
4/9/09	Tedlar	200		
4/10/09	Canister	110	170	
4/11/09	Canister	13	15	
4/12/09	Canister	27	75	
4/13/09	Tedlar		150	230
4/14/09	Tedlar		210	
4/15/09	Tedlar	290		
4/16/09	Tedlar	120	150	
4/17/09	Canister	25	12	
4/18/09	Canister	11	25	
4/19/09	Canister	11	12	
4/20/09	Tedlar	160	160	
4/21/09	Tedlar	140	130	160
Average		**135**	**139**	**276**

- Turbine Offline / No sample taken

EARTHRES GROUP

EarthRes Group, Inc.
P. O. Box 468
Pipersville, PA 18947

TEL 215-766-1211
FAX 215-766-1245
www.earthres.com

ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Dan Treffinger	**From:**	Sam Dean
Company:	DCO Energy	**Date:**	6/01/09
Phone:	(609) 992-6188	**Pages:**	2 — *including* this page
Re:	**1st 30-Day Follow-up Sulfur Sample Results**		

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Dear Dan,

Please find attached the monitoring results for the first 30-day follow up sulfur sampling event performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be sent to your attention. A summary of the results is listed below.

A total of two (2) landfill gas samples were collected for analysis on May 18th, 2009. The samples were shipped to Atlantic Analytical Laboratory (AAL) and analyzed using ASTM Method D5504 for total sulfur. The first sample was collected on the discharge of the second stage compression unit on Train A. A sulfur concentration of 110-ppm was reported. The second sample was collected on the 14" header piping at the inlet to the plant. A sulfur concentration of 140-ppm was reported. All samples taken were delivered to AAL, and analyzed within the required maximum hold time for the method.

We have tentatively scheduled the second 30-day follow up sample for June 16th, 2009; however, this date is flexible and can be adjusted based on the plant's schedule.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

Sam Dean
Project Manager
Landfill Gas Services

Attachment: Atlantic Analytical Laboratory Landfill Gas Analysis Reports

ATLANTIC ANALYTICAL LABORATORY

Landfill Gas Analysis Report

EarthRes Group, Inc.
P.O. Box 468
Pipersville, PA 18947
(215) 766-1211 x 127 FAX (215) 766-1245
Attn: Samuel Dean
Email: sdean@earthres.com

AAL Number: 10753
Received On: 19 May 09
Report Date: 19 May 09
P.O. Number: 081010.002

Sample ID.: Landfill Gas Samples
Sample ID.: 2 – 1L tedlar bags received for Total Sulfur analysis by ASTM D5504.

Total Sulfur by GC-SCD (All results in ppm v/v)

Sample ID	Sample Time	Sample Date	Total Sulfur	DL
1) DCO-051809-01A	1430	18 May 09	110 ppm v/v	0.5 ppm v/v
2) DCO-051809-02I	1440	18 May 09	140 ppm v/v	0.5 ppm v/v

NOTES: **DL** = test detection limit. **nd** = less than the test detection limit. **na** = value is non-applicable.
-- = test not performed. **wt/vol** = weight analyte/volume sample.
LT = less than amount specified. **GT** = greater than amount specified. **µg** = microgram.
% = parts per hundred. **ppm** = parts per million. **ppb** = parts per billion.
Unit Conversions: 0.0001% = 1 ppm = 1,000 ppb = 1µL/L (v/v) or 1µg/g (w/w)

Comments:

Reviewed By,

Bruce Gollob

Addendum: Instrument data on file
Notebook data on file

ISO/IEC 17025:2005 ACCREDITED
PJLA

EARTHRES GROUP

EarthRes Group, Inc.
P. O. Box 468
Pipersville, PA 18947

TEL 215-766-1211
FAX 215-766-1245
www.earthres.com

ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Dan Treffinger	**From:**	John Bechtel
Company:	DCO Energy	**Date:**	7/17/09
Phone:	(609) 992-6188	**Pages:**	2 — *including* this page
Re:	**2nd 30-Day Follow-up Sulfur Sample Results**		

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Dear Dan,

Please find attached the monitoring results for the second 30-day follow up sulfur sampling event performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be sent to your attention. A summary of the results is listed below.

A total of three (3) landfill gas samples were collected for analysis on June 16th, 2009. The samples were shipped to Atlantic Analytical Laboratory (AAL) and analyzed using ASTM Method D5504 for total sulfur. The first sample was collected on the discharge of the second stage compression unit on Train A. A sulfur concentration of 380-ppm was reported. The second sample was collected on the discharge of the second stage compression unit on Train B. A sulfur concentration of 370-ppm was reported. The third sample was collected on the 14" header piping at the inlet to the plant. A sulfur concentration of 420-ppm was reported. All samples taken were delivered to AAL, and analyzed within the required maximum hold time for the method.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

John Bechtel

John Bechtel
Staff Scientist
Landfill Gas Services

Attachment: Atlantic Analytical Laboratory Landfill Gas Analysis Reports

ATLANTIC ANALYTICAL LABORATORY

Landfill Gas Analysis Report

EarthRes Group, Inc.
P.O. Box 468
Pipersville, PA 18947
(215) 766-1211 x 127 FAX (215) 766-1245
Attn: Samuel Dean
Email: sdean@earthres.com

AAL Number: 11052
Received On: 17 Jun 09
Report Date: 18 Jun 09
P.O. Number: 081010.002

Sample ID.: Landfill Gas Samples
Sample ID.: 3 – 1L tedlar bags received for Total Sulfur analysis by ASTM D5504.

Total Sulfur by GC-SCD (All results in ppm v/v)

Sample ID	Sample Time	Sample Date	Total Sulfur	DL
1) DCO-061609-01A	1320	16 Jun 09	380 ppm v/v	0.5 ppm v/v
2) DCO-061609-02B	1435	16 Jun 09	370 ppm v/v	0.5 ppm v/v
3) DCO-061609-03I	1445	16 Jun 09	420 ppm v/v	0.5 ppm v/v

NOTES: **DL** = test detection limit. **nd** = less than the test detection limit. **na** = value is non-applicable.
-- = test not performed. **wt/vol** = weight analyte/volume sample.
LT = less than amount specified. **GT** = greater than amount specified. **µg** = microgram.
% = parts per hundred. **ppm** = parts per million. **ppb** = parts per billion.
Unit Conversions: 0.0001% = 1 ppm = 1,000 ppb = 1µL/L (v/v) or 1µg/g (w/w)

Comments:

Reviewed By:

Ralph J. Ciotti
Laboratory Manager

Addendum: Instrument data on file
Notebook data on file

ISO/IEC 17025:2005 ACCREDITED
PJLA

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ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Dan Treffinger	**From:**	John Bechtel
Company:	DCO Energy	**Date:**	7/27/09
Phone:	(609) 992-6188	**Pages:**	2 — *including* this page
Re:	**3rd 30-Day Follow-up Sulfur Sample Results**		

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Dear Dan,

Please find attached the monitoring results for the third 30-day follow up sulfur sampling event performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be sent to your attention. A summary of the results is listed below.

A total of two (2) landfill gas samples were collected for analysis on July 16th, 2009. The samples were shipped to Atlantic Analytical Laboratory (AAL) and analyzed using ASTM Method D5504 for total sulfur. The first sample was collected on the discharge of the second stage compression unit on Train A. A sulfur concentration of 190-ppm was reported. The second sample was collected on the discharge of the second stage compression unit on Train B. A sulfur concentration of 310-ppm was reported. All samples taken were delivered to AAL, and analyzed within the required maximum hold time for the method.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

John Bechtel
Staff Scientist
Landfill Gas Services

Attachment: Atlantic Analytical Laboratory Landfill Gas Analysis Reports

ATLANTIC ANALYTICAL LABORATORY

Landfill Gas Analysis Report

EarthRes Group, Inc.
P.O. Box 468
Pipersville, PA 18947
(215) 766-1211 x 127 FAX (215) 766-1245
Attn: Samuel Dean
Email: sdean@earthres.com

AAL Number: 11368
Received On: 17 Jul 09
Report Date: 21 Jul 09
P.O. Number: 081010.002

Sample ID.: Landfill Gas Samples
Sample ID.: 2 – 1L tedlar bags received for Total Sulfur analysis by ASTM D5504.

Total Sulfur by GC-SCD (All results in ppm v/v)

Sample ID	Sample Time	Sample Date	Total Sulfur	DL
1) CES-071609-01A	1440	16 Jul 09	190 ppm v/v	0.5 ppm v/v
2) CES-071609-02B	1445	16 Jul 09	310 ppm v/v	0.5 ppm v/v

NOTES: **DL** = test detection limit. **nd** = less than the test detection limit. **na** = value is non-applicable.
-- = test not performed. **wt/vol** = weight analyte/volume sample.
LT = less than amount specified. **GT** = greater than amount specified. **µg** = microgram.
% = parts per hundred. **ppm** = parts per million. **ppb** = parts per billion.
Unit Conversions: 0.0001% = 1 ppm = 1,000 ppb = 1µL/L (v/v) or 1µg/g (w/w)

Comments:

Reviewed By,

Ralph J. Ciotti
Laboratory Manager

Addendum: Instrument data on file
Notebook data on file

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ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Dan Treffinger	**From:**	John Bechtel
Company:	DCO Energy	**Date:**	2/16/10
Phone:	(609) 992-6188	**Pages:**	14 — *including* this page
Re:	**2010 Semi-Annual Sulfur Sample Results**		

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Dear Dan,

Please find attached the monitoring results for the first 2010 semi-annual sulfur sampling event performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be sent to your attention. A summary of the results is provided below.

A total of four (4) landfill gas samples were collected for sulfur analysis on January 27th, 2010. The samples were shipped to Air Toxics Laboratory and analyzed using ASTM Method D5504 for total sulfur. Due to normal pipeline operations a sample was unable to be obtained on the inlet piping to the facility. As an alternative, samples were taken from the UGI1 and UGI2 monitoring locations, which supply gas from the flare stations to the facility.

The sample taken on the discharge of the Train A second stage compression unit yielded a total sulfur concentration of 350 ppm. The sample taken on the discharge of the Train B second stage compression unit yielded a total sulfur concentration of 530 ppm. The sample taken at the UGI1 monitoring location yielded a total sulfur concentration of 170 ppm. The sample taken at the UGI2 monitoring location yielded a total sulfur concentration on 670 ppm.

All samples taken were delivered to Air Toxics within the required maximum hold time for the method. The sample take at the second stage compression unit on Train A was analyzed 21 minutes past its 24-hour hold time. The sample take on the second stage compression unit on Train B was analyzed 9 minutes past its 24-hour hold time. Samples take at monitoring locations UGI1 and UGI2 were both analyzed within the specified 24-hour hold time.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

John Bechtel
Staff Scientist
Landfill Gas Services

Attachment: Air Toxics Laboratory Landfill Gas Analysis Reports

Air Toxics LTD.
Laboratory Services Since 1989

2/5/2010
Mr. Sam Dean
ERG
P.O. Box 468
7137 Old Easton Rd.
Pipersville PA 18947

Project Name: DCO Sulfur Sampling
Project #:
Workorder #: 1001532R1

Dear Mr. Sam Dean

The following report includes the data for the above referenced project for sample(s) received on 1/28/2010 at Air Toxics Ltd.

The data and associated QC analyzed by ASTM D-5504 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Bryanna Langley
Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1001532R1

Work Order Summary

CLIENT:	Mr. Sam Dean ERG P.O. Box 468 7137 Old Easton Rd. Pipersville, PA 18947	**BILL TO:**	Accounts Payable ERG P.O. Box 468 7137 Old Easton Rd. Pipersville, PA 18947
PHONE:	215-766-1211	**P.O. #**	
FAX:	215-766-1245	**PROJECT #**	DCO Sulfur Sampling
DATE RECEIVED:	01/28/2010	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	02/01/2010		
DATE REISSUED:	02/05/2010		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	2010-01-27-TA	ASTM D-5504	Tedlar Bag	Tedlar Bag
02A	2010-01-27-TB	ASTM D-5504	Tedlar Bag	Tedlar Bag
02AA	2010-01-27-TB Lab Duplicate	ASTM D-5504	Tedlar Bag	Tedlar Bag
03A(cancelled)	2010-01-27-PI1	ASTM D-5504	Tedlar Bag	Tedlar Bag
04A	2010-01-27-PI2	ASTM D-5504	Tedlar Bag	Tedlar Bag
05A	2010-01-27-UGI1	ASTM D-5504	Tedlar Bag	Tedlar Bag
06A	Lab Blank	ASTM D-5504	NA	NA
07A	LCS	ASTM D-5504	NA	NA

CERTIFIED BY: Linda L. Freeman

DATE: 02/05/10

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/10
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
SULFUR GASES BY ASTM D-5504 GC/SCD

Client Sample ID: 2010-01-27-TA

Lab ID#: 1001532R1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide	8000	160000
Carbonyl Sulfide	8000	180000
Total Reduced Sulfur ref. to H2S (MW=34)	20000	350000

Client Sample ID: 2010-01-27-TB

Lab ID#: 1001532R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide	10000	500000
Carbonyl Sulfide	10000	12000
Total Reduced Sulfur ref. to H2S (MW=34)	25000	530000

Client Sample ID: 2010-01-27-TB Lab Duplicate

Lab ID#: 1001532R1-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide	4000	460000 E
Carbonyl Sulfide	4000	9400
Total Reduced Sulfur ref. to H2S (MW=34)	10000	480000

Client Sample ID: 2010-01-27-PI2

Lab ID#: 1001532R1-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide	10000	640000
Total Reduced Sulfur ref. to H2S (MW=34)	25000	670000

Client Sample ID: 2010-01-27-UGI1

Lab ID#: 1001532R1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
SULFUR GASES BY ASTM D-5504 GC/SCD

Client Sample ID: 2010-01-27-UGI1

Lab ID#: 1001532R1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide	2400	160000
Total Reduced Sulfur ref. to H2S (MW=34)	6000	170000

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ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Gary Laird	**From:**	John Bechtel
Company:	UGI Energy	**Date:**	5/10/10
Phone:	(610) 373-7999	**Pages:**	34 -- *including* this page
Re:	**30-Day Sulfur Sampling Results**		

CONFIDENTIALITY — The information contained in this transmission is confidential and/or legally privileged. This transmission is intended only for the use of the recipient named above. If you have received this communication in error, please notify us immediately and we will arrange for return of the message at no cost to you.

Please find attached one (1) copy of the monitoring results for the 30-day sulfur sampling performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A copy of the attached information will be mailed to your attention. A summary of the results is presented below.

A total of 48 samples were collected for total sulfur analysis during this project from March 2 to April 25, 2010. Samples taken from March 2 to March 11, 2010 yielded an average sulfur concentration of 766 ppm, which exceeds the sites operational permit limit of 450 ppm. These concentrations resulted in a 14-day shutdown of the facility. Corrective actions were taken to isolate landfill gas with higher sulfur concentrations and direct them to an active gas flare. The facility was brought back online on March 26, 2010 using one (1) gas turbine. Landfill gas sulfur concentrations measured at the facility were below the sites 450 ppm limit at this time. Gas sulfur concentrations averaged 319 ppm in the 30-days following plant restart. Subsequent measured gas concentrations were below the sites permit limit of 450 ppm for all but one day. April 9, 2010, a sulfur concentration of 480 ppm was measured due to a temporary shutdown of the landfills gas flare sending sulfur rich gas to the facility for a short period of time. Sampling after April 9, 2010 showed total sulfur concentrations to be below the permit limit.

Samples were only collected when gas trains were in operation. A total of 24 samples were collected on the discharge of the second stage compression unit on Train A and a total of 9 samples were collected on the discharge of the second stage compression unit on Train B. An average sulfur concentration of 319-ppm was measured on these samples. A total of 3 samples were collected at the flare header piping, identified as UGI1 and UGI2, representing gas entering at the inlet to the plant. An average sulfur concentration of 276-ppm was measured on these samples. All samples were shipped to Columbia Analytical Services (CAS) and analyzed using ASTM Method D5504.

Monday through Thursday samples were shipped to the lab and analyzed within 24 hours following sample collection. Samples taken on Friday, Saturday and Sunday were analyzed as soon as possible, beyond recommended hold times for this method due to limitations in lab and shipping carrier availability.

Please call me at (800) 264-4553 if you have any questions.

EarthRes Group, Inc.

John Bechtel
Staff Scientist
Landfill Gas Services

Attachments: 30-Day Sulfur Sampling Summary Table
Columbia Analytical Services Landfill Gas Analysis Reports

Cc: Dan Treffinger, DCO Energy
Cc: Brett Dexter, CES Landfill

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ENVIRONMENTAL ENGINEERING *and* SCIENCE

Memorandum

To:	Gary Laird	**From:**	John Bechtel
Company:	UGI Energy, Inc.	**Date:**	06/11/2010
Re:	**BMP Landfill Gas Sulfur Monitoring**	**Prj/Task No:**	101003.001

Dear Gary,

EarthRes Group (ERG) has prepared the following memorandum to summarize efforts to decrease landfill gas sulfur concentrations coming from Commonwealth Environmental Services Landfill (CES) and provided to the Broad Mountain Power Facility (BMP). In January of 2010 gas samples were obtained yielding concentrations greater than BMP's permit limit of 450 parts per million by volume (ppmv) during the scheduled semi-annual monitoring event. Due to the elevated sulfur reading, a continuous 30-day sulfur sampling event was initiated on March 2, 2010. Gas sulfur concentrations remained above the permit limit during the first week of testing, and the plant was subsequently taken offline on March 10, 2010. Efforts were made by CES and ERG personnel to help reduce gas sulfur concentrations at the landfill while the plant was offline. Following these efforts, the BMP facility was brought back online on March 26, 2010, and a second 30-day sulfur sampling event was initiated.

ERG routinely monitors and balances the gas wellfield at CES twice per week for compliance monitoring, and to help maintain gas quality for sale to gas end-users. Following the elevated readings identified during the initial 30-day sampling events for BMP, ERG performed field testing to identify the elevated sources of the sulfur rich gas collected at the landfill. Gas sulfur readings were taken using a portable Drager hand pump and hydrogen sulfide colorimetric tubes. Hydrogen sulfide has been determined to be the primary component of the total sulfur concentrations based on lab results from previous sampling events. Results of sulfur concentrations measured at the two blower locations and a timeline of actions taken to help lower gas sulfur concentrations are provided in the attached Table 1.

Elevated sources of sulfur were observed to be local to the Flare 2 blower system which primarily delivers landfill gas to BMP. During the period that the plant was offline, ERG throttled down collectors that were identified with high sulfur concentrations in an effort to lower total sulfur concentrations delivered to Flare 2. Following the start up of BMP on March 26, 2010, gas sulfur concentrations were observed to be below the sites permit level for total sulfur concentration. The plant resumed operation using the Flare 2 blower system to deliver gas to one (1) turbine.

Gas sulfur concentrations were identified as being much lower at the Flare 1 blower system then the gas sulfur concentrations measured at the Flare 2 blower system. Normal BMP pipeline operation utilizes the Flare 2 blower system as the primary supply, and the Flare 1 blower system as a secondary supply of landfill gas. On April 8, 2010 primary gas delivery to the BMP pipeline was switched over from the Flare 2 blower system to the Flare 1 blower system. The Flare 1 blower system is currently used as the primary gas delivery system due to the lower sulfur concentrations at Flare 1. The Flare 2 blower system is only used as a secondary delivery system, and only provides gas to the plant when two (2) turbines are in operation.

Current gas flow conditions will only allow for two (2) turbine operation at BMP when adequate fuel supply is available. Additional gas flow is currently available when CES's other end user, Keystone Potato Products (KPP), is either offline or running at a reduced flow rate. Under these conditions the gas blended from the two (2) flare blower systems has resulted in gas sulfur concentrations below the sites current operating limit.

Following the 30-day sampling event, monthly samples will be taken for a period of three (3) months to monitor gas sulfur concentrations. The first sampling event was completed on May 21, 2010. Additional samples are scheduled for June and July of 2010. Results of all sulfur sampling efforts to date are attached.

CES and ERG are currently working on a gas system expansion project to increase the number of gas collectors at the landfill. This will add flexibility when making wellfield adjustments to help lower overall gas sulfur concentrations. ERG will continue to monitor gas sulfur concentrations during routine gas system monitoring events and will continue to make adjustments in an effort to maintain gas sulfur concentrations within BMP's current operating permit limits.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

John Bechtel
Staff Scientist
Landfill Gas Services

Attachments: Table 1 – Landfill Gas Hydrogen Sulfide Concentrations
2010 Semi-Annual Sulfur Sample Results
30-Day Sulfur Sampling Results
May 2010 Sulfur Sampling Results
Hydrogen Sulfide Drager Tube Data Sheet

Cc: Sam Dean, ERG
Cc: Chad Leatherwood, SCS Engineers

Broad Mountain Power Facility **Updated: 5/10/10**

30-Day Sulfur Sampling Summary Table

			Sulfur Content (ppm)				
Sample #	**Date**	**Sample Type**	**Train A**	**Train B**	**UGI1**	**UGI2**	**Notes**
1	3/2/10	Tedlar		730		840	Start of Sampling, Train A offline due to bad compressor
2	3/3/10	Tedlar		690		870	
3	3/4/10	Tedlar		790			
4	3/5/10	Tedlar		730			
5	3/6/10	Tedlar		720			
6	3/7/10	Tedlar		770			
7	3/8/10	Tedlar		860	330	830	
8	3/9/10	Tedlar		820			
9	3/10/10	Tedlar		780			
10	3/11/10	Tedlar			290	730	Plant Offline due to high sulfur concentrations, Samples obtained at flare locations
11	3/26/10	Tedlar		280			30-Day Sampling Restarted
12	3/27/10	Tedlar		340			
13	3/28/10	Tedlar		380			
14	3/29/10	Tedlar		NA			No Sample - Plant offline for compressor programing
15	3/30/10	Tedlar		360			
16	3/31/10	Tedlar		350			
17	4/1/10	Tedlar		270			
18	4/2/10	Tedlar	320				
19	4/3/10	Tedlar	350				
20	4/4/10	Tedlar	340				
21	4/5/10	Tedlar	300				
22	4/6/10	Tedlar	380				
23	4/7/10	Tedlar	310				
24	4/8/10	Tedlar	350				
25	4/9/10	Tedlar	480				Flare 2 offline for header repairs, Plant begins to take gas
26	4/10/10	Tedlar	180		200		
27	4/11/10	Tedlar	270				
28	4/12/10	Tedlar	360				
29	4/13/10	Tedlar	270				
30	4/14/10	Tedlar	290		290		
31	4/15/10	Tedlar	420				Power outage - Gas delivered by Flare 2 Blowers until programming could be repaired at Flare 1
32	4/16/10	Tedlar	220				Gas delivery switched back to Flare 1 blowers
33	4/17/10	Tedlar	240				
34	4/18/10	Tedlar	340				
35	4/19/10	Tedlar	300				
36	4/20/10	Tedlar	340		340		
37	4/21/10	Tedlar	330				
38	4/22/10	Tedlar	300				
39	4/23/10	Tedlar	310				
40	4/24/10	Tedlar	310				
41	4/25/10	Tedlar	280				End of Sampling
	Average		**316**	**591**	**278**	**818**	

- Turbine Offline / No sample taken

Table 1 - Landfill Gas Hydrogen Sulfide Concentrations **Broad Mountain Power Facility**

Date	Time	Flare 1 / UGI1 H_2S (ppm)	Flare 2 / UGI2 H2S (ppm)	UGI1 Gas Flow (cfm)	UGI2 Gas Flow (cfm)	Non-UGI Gas Flow (cfm)	Site Composite H2S (ppm)	Actual Gas to UGI H2S (ppm)	Actions Taken
3/16/10	12:00	200	795	0	0	4686	479	offline	Gas system was monitored to identify collectors with high sulfur concentrations Broad Mountain Power Facility was offline at this time.
3/16/10	14:30	190	675	0	0	4715	413	offline	
3/17/10	10:30	205	810	0	0	4764	475	offline	
3/17/10	11:45	--	250	0	0	3926	--	offline	
3/17/10	13:00	--	225	0	0	3928	--	offline	
3/17/10	14:30	200	375	0	0	3988	273	offline	
3/18/10	9:45	201	400	0	0	3969	286	offline	
3/25/10	10:40	175	575	0	0	4770	353	offline	
3/25/10	14:52	175	250	0	0	4323	210	offline	
3/26/10	9:00	205	625	0	0	4078	422	offline	Wellfield was tuned to reduce sulfur concentrations going to the flares prior to returning to online status at the facility.
3/26/10	10:45	--	325	0	0	4066	--	offline	
3/26/10	13:30	--	300	0	0	4049	--	offline	
3/26/10	16:00	205	395	0	2390	1492	322	395	
3/27/10	14:30	--	275	0	2392	1520	--	275	Gas collectors with high sulfur concentrations were throttled down to minimize the amount of sulfur rich gas going to the facility. Gas delivery to BMP delivered by the Flare 2 blower system.
3/28/10	14:30	--	300	0	2349	1936	--	300	
4/2/10	14:30	--	190	0	2205	1230	--	190	
4/3/10	14:30	--	193	0	2208	1297	--	193	
4/4/10	14:30	--	207	0	2209	1259	--	207	
4/5/10	14:30	--	125	0	1770	1911	--	125	
4/6/10	14:30	--	180	0	1871	2229	--	180	
4/7/10	14:30	--	180	0	1796	2166	--	180	
4/8/10	14:30	--	195	0	1831	2002	--	195	
4/13/10	14:30	195	--	1692	0	2413	--	195	Gas delivery to BMP was switched over to the Flare 1 blower system.
4/14/10	14:30	180	--	1717	0	2462	--	180	
4/15/10	14:30	50	600	1154	0	3200	313	50	
4/16/10	14:30	200	915	2188	0	2225	560	200	
4/17/10	14:30	200	--	2198	0	1756	--	200	
4/18/10	14:30	160	--	2195	0	1741	--	160	
4/19/10	14:30	180	590	2191	0	2041	289	180	
4/20/10	14:30	200	410	1638	0	2584	284	200	
4/21/10	14:30	110	805	1927	0	2402	382	110	
4/22/10	14:30	140	680	1788	0	2853	394	140	
4/23/10	14:30	150	--	2254	0	1842	--	150	
4/24/10	14:30	200	--	2269	0	1958	--	200	
5/11/10	11:45	200	1050	2090	0	1990	411	200	Wellfield was tuned to reduce gas sulfur concentrations.
5/11/10	13:10	170	1000	2090	0	1980	370	170	
5/11/10	13:30	160	920	2090	0	1980	343	160	
5/11/10	14:15	175	960	2080	0	2090	367	175	
5/12/10	11:45	200	850	2070	0	2040	380	200	
5/12/10	12:30	150	600	2070	0	2100	323	150	
5/12/10	14:50	120	500	1710	0	2800	284	120	
5/12/10	16:00	140	590	1600	0	2840	322	140	
5/20/10	12:50	150	950	2200	0	1930	344	150	
5/20/10	13:10	110	1000	2200	0	1950	335	110	
6/8/10	8:35	200	980	2349	0	2135	396	200	
6/8/10	9:35	150	1005	2349	0	2135	376	150	

Note:

1. UGI1 and UGI2 Flow Rates Represent Gas Flow to Broad Mountain Power Facility.
2. "--" indicates no data recorded
3. H_2S readings measured using colorimetric Drager tubes.
4. Site composite hydrogen sulfide concentrations are a weighted average calculation based on flow rates and concentrations measured at Flare 1/UGI1 and Flare 2/UGI2.

EARTHRES GROUP

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ENVIRONMENTAL ENGINEERING *and* SCIENCE

Transmittal

To:	Gary Laird	**From:**	John Bechtel
Company:	UGI Energy, Inc.	**Date:**	6/9/10
Phone:	(610) 373-7999	**Pages:**	9 — *including* this page
Re:	**May 2010 Sulfur Sample Results**		

CONFIDENTIALITY — The information contained in this transmission is confidential and/or legally privileged. This transmission is intended only for the use of the recipient named above. If you have received this communication in error, please notify us immediately and we will arrange for return of the message at no cost to you.

Dear Gary,

Please find attached the monitoring results for the May 2010 sulfur sampling event performed by EarthRes Group (ERG) at the Broad Mountain Power Facility. A summary of the results is provided below.

A total of two (2) landfill gas samples were collected for sulfur analysis on May 21st, 2010. The samples were shipped to Columbia Analytical Services, Inc. (CAS) and analyzed using ASTM Method D5504 for total sulfur. Due to normal pipeline operations a sample was unable to be obtained on the inlet piping to the facility.

The sample taken on the discharge of the Train A second stage compression unit yielded a total sulfur concentration of 420 parts per million by volume (ppmv). The sample taken on the discharge of the Train B second stage compression unit yielded a total sulfur concentration of 440 ppmv. The two (2) samples taken were delivered to CAS and were analyzed past the ASTM Method D5504 24-hour hold time due to limitations in sample shipment and lab availability.

I can be reached at (800) 264-4553 if you have any questions.

Best Regards,
EarthRes Group, Inc.

John Bechtel
Staff Scientist
Landfill Gas Services

Attachment: Columbia Analytical Services Landfill Gas Analysis Report

LABORATORY REPORT

June 8, 2010

John Bechtel
EarthRes Group
P.O. Box 468
Pipersville, PA 18947

RE: DCO Sulfur Sampling / 081010.006

Dear John:

Enclosed are the results of the samples submitted to our laboratory on May 24, 2010. For your reference, these analyses have been assigned our service request number P1001795.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains _____ pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-09-TX; Minnesota Department of Health, Certificate No. 11495AA; Washington State Department of Ecology, ELAP Lab ID: C946. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

Client: EarthRes Group
Project: DCO Sulfur Sampling / 081010.006

CAS Project No: P1001795

CASE NARRATIVE

The samples were received intact under chain of custody on May 24, 2010 and were stored in accordance with the analytical method requirements. The samples were received past the recommended holding time. The analysis was performed as soon as possible after receipt by the laboratory. The data is flagged to indicate the holding time exceedances. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Total Reduced Sulfur as Hydrogen Sulfide Analysis

The samples were analyzed for total reduced sulfur as hydrogen sulfide (TRS as H2S) in accordance with ASTM D 5504-08 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). The results were determined by obtaining the total response for all chromatographic peaks and quantitating the value against the initial calibration curve for hydrogen sulfide thus generating a result specified as "Total Reduced Sulfur as Hydrogen Sulfide".

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Client: **EarthRes Group**
Client Project ID: **DCO Sulfur Sampling / 081010.006**

CAS Project ID: P1001795

Total Reduced Sulfur as Hydrogen Sulfide

Test Code: ASTM D 5504-08
Instrument ID: HP5890 II/GC5/SCD
Analyst: Zheng Wang
Sampling Media: 1.0 L Tedlar Bag(s)
Test Notes:

Date(s) Collected: 4/21/10
Date Received: 5/24/10
Date Analyzed: 5/24/10

Client Sample ID	CAS Sample ID	Injection Volume ml(s)	Time Analyzed	**Result µg/m³**	MRL µg/m³	**Result ppbV**	MRL ppbV	Data Qualifier
20100421-Train A	P1001795-001	0.10	09:59	**580,000**	280	**420,000**	200	**H3**
20100421-Train B	P1001795-002	0.10	10:23	**620,000**	280	**440,000**	200	**H3**
Method Blank	P100524-MB	1.0	09:29	ND	28	ND	20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H3 = Sample was received and analyzed past holding time.

Verified By: _____ Date: 6/4/10

APPENDIX E

ANNUAL NO_X AND CO TESTING - TURBINES

CO AND NO_X EMISSIONS
TEST REPORT FOR

COMBUSTION TURBINES A & B
UGI DEVELOPMENT CORP.
COMMONWEALTH ENVIRONMENTAL SERVICES LANDFILL
44 COMMONWEALTH ROAD
HEGINS, PENNSYLVANIA

Prepared for
UGI DEVELOPMENT CORP.
One Meridian Boulevard
Suite 2C01
Wyomissing PA 19610
Attn: Gary Laird

Test Date:
June 5, 2010

Report Date:
June 11, 2010

Arrow Environmental Consulting, LLC PO Box 3658 Easton PA 18043 Phone: (610) 597-1770
andrewmcneel@rcn.com Fax: (610) 258-2470

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2.0 PERSONNEL & CERTIFICATIONS 1

3.0 EMISSIONS SUMMARY 2

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1 Turbine A Firing Landfill Gas Emissions Summary 2
2 Turbine B Firing Landfill Gas Emissions Summary 2

APPENDICES

I EMISSIONS DATA
II CALIBRATION DATA
III PROCESS DATA

1.0 INTRODUCTION

Arrow Environmental Consulting, LLC (Arrow) completed emission testing at UGI Development Corp.'s (UGI) facility at the Commonwealth Environmental Services Landfill in Hegins, Pennsylvania. Two simple cycle turbines (A and B) were tested during landfill gas fired operations. The tests were completed on June 5, 2010.

Concentrations of carbon monoxide (CO), nitrogen oxides (NO and NO_2 for NO_x), and oxygen were measured. Triplicate tests of fifteen minutes each were completed on each turbine for each parameter. The test results are summarized in Tables 1 and 2. In addition to the individual run results, the allowable emission concentrations as understood by Arrow are also presented.

Testing was completed utilizing a Testo 350XL portable analyzer calibrated onsite with USEPA Protocol standards. The analyzer was challenged with the protocol-standards prior to initiating testing. Sampling for each run was completed for seventeen continuous minutes. The first two minutes were used to allow the analyzer to stabilize to the stack gas and the last fifteen minutes were used for the actual reported test run. The analyzer was allowed to refresh (purge with ambient air) for a minimum of five minutes between each test run. The analyzer was then challenged with the same standards following completion of testing. All responses were within ± 3% or ± 1 ppm of each gas standard's value.

All emissions data and calculations are presented in Appendix I. Calibration data, including certificates for all calibration gas standards, are in Appendix II. Process data, including landfill gas firing rates and electrical production, are presented in Appendix III.

2.0 PERSONNEL AND CERTIFICATIONS

The emissions testing was conducted on June 5, 2010 by Andrew W. McNeel of Arrow Environmental Consulting, LLC.

I certify that I have personally examined and am familiar with the information developed or received by Arrow personnel in this report and, to the best of my knowledge, this information is true, accurate, and complete.

Andrew W. McNeel
Managing Member
Arrow Environmental Consulting, LLC

3.0 SUMMARY OF RESULTS

Table 1: Turbine A at Firing Landfill Gas

RUN	1	2	3	ALLOWABLE
DATE	06/05/10	06/05/10	06/05/10	---
TIME	1057 – 1112	1118 – 1133	1139 - 1154	---
LFG FIRING RATE (scfm)	1,950	1,945	1,930	N/A
MEGAWATT	3.74	3.73	3.72	5.5
NITROGEN OXIDES ($NO + NO_2$)				
PPMV (dry)	16	15	14	N/A
PPMV @ 15% O_2 (dry)	19	18	16	42.0
CARBON MONOXIDE				
PPMV (dry)	73	72	71	N/A
PPMV @ 15% O_2 (dry)	88	87	86	100
OXYGEN				
% by volume, dry	16.0	16.0	16.0	N/A

Table 2: Turbine B at Firing Landfill Gas

RUN	1	2	3	ALLOWABLE
DATE	06/05/10	06/05/10	06/05/10	---
TIME	0929 – 0944	0959 - 1014	1021 - 1036	---
LFG FIRING RATE (scfm)	1,820	1,810	1,820	N/A
MEGAWATT	3.56	3.53	3.55	5.5
NITROGEN OXIDES ($NO + NO_2$)				
PPMV (dry)	16	16	16	N/A
PPMV @ 15% O_2 (dry)	20	20	20	42.0
CARBON MONOXIDE				
PPMV (dry)	74	74	74	N/A
PPMV @ 15% O_2 (dry)	93	94	94	100
OXYGEN				
% by volume, dry	16.2	16.2	16.3	N/A

Date	Time	[% O2]	[ppm CO]	[ppm NO]	[ppm NO2]	[ppm NOx]
6/5/2010	10:21:20 AM	16.33	76.2	13	1.9	15
6/5/2010	10:21:35 AM	16.25	75.8	14	1.8	16
6/5/2010	10:21:50 AM	16.22	72.9	14	1.6	16
6/5/2010	10:22:05 AM	16.31	71.9	14	1.5	15
6/5/2010	10:22:20 AM	16.32	74.9	14	1.7	15
6/5/2010	10:22:35 AM	16.25	76.2	14	1.7	16
6/5/2010	10:22:50 AM	16.21	73.1	14	1.8	16
6/5/2010	10:23:05 AM	16.28	71.6	14	1.8	16
6/5/2010	10:23:20 AM	16.35	73.7	14	1.8	15
6/5/2010	10:23:35 AM	16.28	75.5	14	2.0	16
6/5/2010	10:23:50 AM	16.22	73.2	15	2.0	17
6/5/2010	10:24:05 AM	16.27	70.9	14	2.1	16
6/5/2010	10:24:20 AM	16.33	73.2	13	2.2	16
6/5/2010	10:24:35 AM	16.29	76.0	14	2.2	16
6/5/2010	10:24:50 AM	16.23	74.7	14	2.3	16
6/5/2010	10:25:05 AM	16.24	72.0	14	2.2	16
6/5/2010	10:25:20 AM	16.33	72.7	14	2.4	16
6/5/2010	10:25:35 AM	16.31	76.0	13	2.5	16
6/5/2010	10:25:50 AM	16.24	75.5	14	2.4	16
6/5/2010	10:26:05 AM	16.21	72.5	14	2.3	16
6/5/2010	10:26:20 AM	16.29	71.6	13	2.4	16
6/5/2010	10:26:35 AM	16.32	74.7	13	2.4	16
6/5/2010	10:26:50 AM	16.25	75.5	13	2.6	16
6/5/2010	10:27:05 AM	16.20	72.8	14	2.6	16
6/5/2010	10:27:20 AM	16.26	71.1	13	2.5	16
6/5/2010	10:27:35 AM	16.34	73.8	13	2.7	16
6/5/2010	10:27:50 AM	16.28	76.4	13	3.0	16
6/5/2010	10:28:05 AM	16.21	74.8	13	2.9	16
6/5/2010	10:28:20 AM	16.25	71.8	13	2.9	16
6/5/2010	10:28:35 AM	16.34	73.8	13	3.0	16
6/5/2010	10:28:50 AM	16.28	77.0	13	3.0	16
6/5/2010	10:29:05 AM	16.20	75.0	13	3.0	16
6/5/2010	10:29:20 AM	16.22	71.9	13	2.9	16
6/5/2010	10:29:35 AM	16.32	72.3	13	3.0	16
6/5/2010	10:29:50 AM	16.30	75.5	13	3.2	16
6/5/2010	10:30:05 AM	16.22	75.1	13	3.3	16
6/5/2010	10:30:20 AM	16.20	72.4	13	3.3	17
6/5/2010	10:30:35 AM	16.29	71.8	13	3.1	16
6/5/2010	10:30:50 AM	16.31	74.4	13	3.4	16
6/5/2010	10:31:05 AM	16.24	74.6	13	3.5	16
6/5/2010	10:31:20 AM	16.21	72.2	13	3.4	16
6/5/2010	10:31:35 AM	16.28	70.9	13	3.6	17
6/5/2010	10:31:50 AM	16.33	73.3	12	3.7	16
6/5/2010	10:32:05 AM	16.25	75.5	12	3.7	16
6/5/2010	10:32:20 AM	16.19	73.6	13	3.5	16
6/5/2010	10:32:35 AM	16.24	71.4	13	3.7	17
6/5/2010	10:32:50 AM	16.32	73.1	13	3.6	16
6/5/2010	10:33:05 AM	16.27	75.3	12	3.6	16
6/5/2010	10:33:20 AM	16.19	73.8	13	3.7	17
6/5/2010	10:33:35 AM	16.21	71.2	13	3.5	16
6/5/2010	10:33:50 AM	16.30	71.2	12	3.8	16
6/5/2010	10:34:05 AM	16.29	74.6	12	3.9	16
6/5/2010	10:34:20 AM	16.22	74.6	12	3.9	16
6/5/2010	10:34:35 AM	16.19	71.7	13	3.8	16
6/5/2010	10:34:50 AM	16.27	70.4	12	3.7	16
6/5/2010	10:35:05 AM	16.32	73.6	12	3.8	16
6/5/2010	10:35:20 AM	16.26	75.3	12	3.8	16
6/5/2010	10:35:35 AM	16.19	73.1	13	4.0	17
6/5/2010	10:35:50 AM	16.22	70.4	12	3.8	16
6/5/2010	10:36:05 AM	16.32	71.0	12	3.9	16
averages		16.26	73.52	13.13	2.89	16.03
Turb B		O2	CO	NO	NO2	Nox
Run 3						
			CO@ 15% O2			Nox@15% O2
			93.6			20

CERTIFICATE OF ANALYSIS

EPA PROTOCOL MIXTURE

PROCEDURE # : G1

CUSTOMER: Arrow Env. Consulting
SALES#: 107355208
PROD#: 1138614
P.O.# : 100425

CYLINDER # : CC-329842
CYLINDER PRES: 2000 PSIG
CGA OUTLET: 660

CERTIFICATION DATE: 5/17/2010
EXPIRATION DATE: 5/17/2012

CERTIFICATION HISTORY

COMPONENT	DATE OF ASSAY	MEAN CONCENTRATION	CERTIFIED CONCENTRATION	ANALYTICAL ACCURACY
Nitric Oxide	5/10/2010 5/17/2010	25.22 ppm 25.28 ppm	25.3 ppm	+/- 1%
NOx			25.3 ppm	Reference Value Only

BALANCE Nitrogen

PREVIOUS CERTIFICATION DATES: None

REFERENCE STANDARDS

COMPONENT	SRM/NTRM#	CYLINDER#	CONCENTRATION
Nitric Oxide	NTRM-81684	CC-202724	98.8 ppm

INSTRUMENTATION

COMPONENT	MAKE/MODEL	SERIAL #	DETECTOR	CALIBRATION DATE(S)
Nitric Oxide	CAI-400-CLD	6L09004	Chemi	5/17/2010

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

ANALYST: GHL
CODY HAMLIN

Linde Gas North America LLC

DATE: 5/17/2010

(908) 454-7455 Main (908) 252-0811 Fax
www.spectragases.com

Spectra Gases, Inc.

3434 Route 22 West, Branchburg, New Jersey 08876 USA

ISO 9001:2000

Shipped from: 80 Industrial Drive, Alpha, NJ 08865

CERTIFICATE OF ANALYSIS

EPA PROTOCOL MIXTURE

PROCEDURE # : G1

CUSTOMER: Arrow Env. Consulting
SGI ORDER # : 146592
ITEM# : 4
P.O.# : 090507

CYLINDER # : CC-113905
CYLINDER PRES: 2000 PSIG
CGA OUTLET: 660

CERTIFICATION DATE: 5/27/2009
EXPIRATION DATE: 5/27/2011

CERTIFICATION HISTORY

COMPONENT	DATE OF ASSAY	MEAN CONCENTRATION	CERTIFIED CONCENTRATION	ANALYTICAL ACCURACY
Nitric Oxide	5/13/2009	54.74 ppm	54.7 ppm	+/- 1%
	5/27/2009	54.7 ppm		
NOx			54.8 ppm	Reference Value Only

BALANCE Nitrogen

PREVIOUS CERTIFICATION DATES: None

REFERENCE STANDARDS

COMPONENT	SRM/NTRM#	CYLINDER#	CONCENTRATION
Nitric Oxide	NTRM-81684	CC-202740	98.8 ppm

INSTRUMENTATION

COMPONENT	MAKE/MODEL	SERIAL #	DETECTOR	CALIBRATION DATE(S)
Nitric Oxide	CAI-400-CLD	6L09004	Chemi	4/14/2009

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

ANALYST: CODY HAMLIN

DATE: 5/27/2009

Tel: +1 908-252-9300 Fax: +1 908-252-0811
www.spectragases.com

THE LINDE GROUP

Linde

CERTIFICATE OF ANALYSIS

EPA PROTOCOL MIXTURE

PROCEDURE # : G1

CUSTOMER: Arrow Env. Consulting
SALES#: 107261001
PROD#: 1133631
P.O.# : 100306

CYLINDER # : CC-106769
CYLINDER PRES: 2000 PSIG
CGA OUTLET: 660

CERTIFICATION DATE: 3/31/2010
EXPIRATION DATE: 9/31/2010

CERTIFICATION HISTORY

COMPONENT	DATE OF ASSAY	MEAN CONCENTRATION	CERTIFIED CONCENTRATION	ANALYTICAL ACCURACY
Nitrogen Dioxide	3/24/2010 3/31/2010	54.10 ppm 54.54 ppm	54.3 ppm	+/- 2%

BALANCE Air

PREVIOUS CERTIFICATION DATES: None

REFERENCE STANDARDS

COMPONENT	SRM/NTRM#	CYLINDER#	CONCENTRATION
Nitrogen Dioxide	NTRM-82660	CC-200725	97.6 ppm

INSTRUMENTATION

COMPONENT	MAKE/MODEL	SERIAL #	DETECTOR	CALIBRATION DATE(S)
Nitrogen Dioxide	Thermo-42i-HL	621417605	Chemi	3/8/2010

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

ANALYST: CODY HAMLIN

Linde Gas North America LLC

DATE: 3/31/2010

(908) 454-7455 Main (908) 252-0811 Fax
www.spectragases.com