HOOSIER ENERGY
RURAL ELECTRIC COOPERATIVE, INC.
A Touchstone Energy® Cooperative

January 20, 2011

Via Certified Mail

Certified No: 7010 0780 0002 1588 6494

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611 Ben Franklin Station
Washington, DC 20044-7611
DJ# 90-5-2-1-09174

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U.S. Environmental Protection Agency
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Justin D. Barrett
Deputy Attorney General
Indiana Office of the Attorney General
302 West Washington Street
IGCS Fifth Floor
Indianapolis, IN 46204

RE: Hoosier Energy Consent Decree, Civil Action No.: 1:10-CV-0935-L3M-TAB PM and H2SO4 Stack Test Reports

Dear Sir or Madam:

Per paragraph 116, 122 and 123 of Hoosier Energy's Consent Decree, please find enclosed stack test reports for Ratts PM, Unit 1 and Unit 2, Merom PM, Units 1 and Unit 2 and Merom H2SO4, Unit1 and Unit 2.

If you have any questions, please feel free to contact me at (812) 935-4713 or email at jpatterson@hepn.com.

Sincerely,

Jay Patterson
Air Quality Team Leader

Attachment

RJP/pjm

Cc: Karl Back Hoosier Energy/Merom Central Files
Chris Norris Hoosier Energy/Ratts Central Files
Central Files
Christopher M. Goffinet, Esq.
John M. Holloway, III, Esq.
Elizabeth C. Williamson, Esq.
Ec: Bob Richhart
Route: M. Reilly/ R. Hochstetler/ C. Chrispell/ Jay Patterson/ File CD1.03

EMISSIONS
TEST REPORT
FOR
HOOSIER ENERGY
MEROM GENERATING STATION
UNIT 1
December 7-10, 2010

Job # 10-480

Test Report Date: 01-10-11

Grace Consulting, Inc.
Emissions Testing Services

January 10, 2011

I, Hal Stiles, hereby certify that the data obtained for Hoosier Energy at the Merom Generating Station, Unit 1 are in accordance with procedures set forth by the USEPA. This report accurately represents the data obtained from the testing procedures and analysis of this data.

Hal Stiles, QSTI
Crew Chief

I, Carl Vineyard, hereby certify that I have reviewed this report and to the best of my knowledge, the data presented herein is complete and accurate.

Carl Vineyard, P.E., QSTI
Test Engineer

Grace Consulting, Inc.
P.O. Box 58
510 Dickson St.
Wellington, OH 44090

Phone: 440-647-6672
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INTRODUCTION

This report presents the results of the emissions tests performed for Hoosier Energy at the Merom Generating Station, Unit 1.

The purpose of the tests was to determine the emissions of the unit. The results can be found in the Summary of Test Results section of this report.

The testing was performed by Grace Consulting, Inc., located at 510 Dickson Street, Wellington, OH 44090. Present during the testing were Hal Stiles, Dave Moody, Ricky Prosser, and Steve Tully from Grace Consulting, Inc. Craig Chrispell was present to observe the testing from Hoosier Energy. .

The tests were performed on December 7-10, 2010. The testing was completed in accordance with USEPA test methods as published in the July 1, 2010 Federal Register, - "Standards of Performance for New Stationary Sources" and subsequent revisions.

The sampling and analytical procedures can be found in the Sampling and Analytical Procedures section of this report. The raw field data and the equations used to determine the final results are presented in the Appendix section.

SUMMARY OF TEST RESULTS

The following presents the results of the emissions tests performed for Hoosier Energy at the Merom Generating Station, Unit 1.

H_2SO_4 Analysis

Method 8A

Run #	Description	lb/dscf	ppm dry	lb/mmBtu
1	High Load	3.97E-06	15.61	0.060
2	High Load	4.25E-06	16.72	0.069
3	High Load	3.79E-06	14.91	0.056
AVG.		**4.00E-06**	**15.75**	**0.062**
1	Mid Load	4.16E-06	16.38	0.071
2	Mid Load	4.72E-06	18.58	0.082
3	Mid Load	4.68E-06	18.44	0.080
AVG.		**4.52E-06**	**17.80**	**0.078**
1	Low Load	3.08E-06	12.13	0.057
2	Low Load	3.97E-06	15.65	0.073
3	Low Load	4.21E-06	16.59	0.078
AVG.		**3.76E-06**	**14.79**	**0.069**

The complete results can be found on the computer printouts following.

GRACE CONSULTING, INC.

H2SO4 Analysis

Hoosier Energy
Merom Station
Unit 1 Stack
10-480

Run Number			1	2	3
Date			12/7/2010	12/7/2010	12/8/2010
Location			Unit 1 Stack	Unit 1 Stack	Unit 1 Stack
Comment			High Load	High Load	High Load
Start Time			19:05	21:58	0:54
End Time			20:05	22:58	1:54
Barometric Pressure	In. Hg.	Pb	29.62	29.62	29.62
Volume Sampled	dcf	Vm	21.035	21.145	20.985
Meter Correction Factor		Y	0.976	0.976	0.976
Orifice Pressure	In. H2O		0.42	0.39	0.39
Meter Temperature	Degree F		53.0	54.0	53.0
Percent O2	%		7.4	8.4	7
Sample Time	min.		60	60	60
Volume of Solution	ml		100.5	102.5	93.5
Volume of Aliquot	ml		10	10	10
Normality of Barium	N		0.0091	0.0091	0.0091
Volume toTitrate Blank	ml		0.00	0.00	0.00
Volume to Titrate sample	ml		8.40	8.85	8.60
F-Factor			9,780	9,780	9,780
Corrected Sample Volume	dscf	Vms	20.94	21.01	20.89
H2SO4 Concentration	lb/dscf		3.97E-06	4.25E-06	3.79E-06
H2SO4 Concentration	ppm dry		15.61	16.72	14.91
H2SO4 Emissions	lb/mmBtu		0.060	0.069	0.056

Averages:				
		H2SO4 Emissions:	lb/dscf	4.00E-06
			ppm dry	15.75
Percent O2:	7.60 %		lb/mmBtu	0.062

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
High Load

Date: 12-7/8-2010
Pollutant: CO2
Monitor Span: 18.1

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	11.59	0.03	0.05	0.11	10.07	10.12	0.28	10.50	12.10
2	11.00	0.05	0.05	0.00	10.12	10.10	-0.11	10.50	11.40
3	11.72	0.05	0.03	-0.11	10.10	10.18	0.44	10.50	12.10

$$Cgas = (Cavg - Co) * Cma / (Cm - Co) \qquad \text{Eq. 6C-1}$$

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
High Load

Date: 12-7/8-2010
Pollutant: O2
Monitor Span: 22.5

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	7.84	0.89	0.70	-0.84	11.38	11.11	-1.20	11.00	7.40
2	8.61	0.70	0.67	-0.13	11.11	11.10	-0.04	11.00	8.40
3	7.28	0.67	0.67	0.00	11.10	11.10	0.00	11.00	7.00

Cgas = (Cavg - Co) * Cma / (Cm - Co) Eq. 6C-1

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

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H2SO4 Analysis

Hoosier Energy
Merom Station
Unit 1 Stack
10-480

Run Number			1	2	3
Date			12/9/2010	12/9/2010	12/9/2010
Location			Unit 1 Stack	Unit 1 Stack	Unit 1 Stack
Comment			Mid Load	Mid Load	Mid Load
Start Time			16:00	17:20	18:36
End Time			17:00	18:20	19:36
Barometric Pressure	In. Hg.	Pb	29.66	29.66	29.66
Volume Sampled	dcf	Vm	21.001	20.863	21.299
Meter Correction Factor		Y	0.99	0.99	0.99
Orifice Pressure	In. H2O		0.41	0.42	0.42
Meter Temperature	Degree F		54.0	58.0	62.0
Percent O2	%		9	9.1	8.9
Sample Time	min.		60	60	60
Volume of Solution	ml		69.5	89.5	96.0
Volume of Aliquot	ml		10	10	10
Normality of Barium	N		0.0091	0.0091	0.0091
Volume toTitrate Blank	ml		0.00	0.00	0.00
Volume to Titrate sample	ml		12.90	11.20	10.50
F-Factor			9,780	9,780	9,780
Corrected Sample Volume	dscf	Vms	21.19	20.89	21.17
H2SO4 Concentration	lb/dscf		4.16E-06	4.72E-06	4.68E-06
H2SO4 Concentration	ppm dry		16.38	18.58	18.44
H2SO4 Emissions	lb/mmBtu		0.071	0.082	0.080

Averages:				
		H2SO4 Emissions:	lb/dscf	4.52E-06
			ppm dry	17.80
Percent O2:	9.00 %		lb/mmBtu	0.078

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
Mid Load

Date: 12/9/2010
Pollutant: CO2
Monitor Span: 18.1

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	10.50	0.07	0.07	0.00	10.49	10.45	-0.22	10.55	10.60
2	10.50	0.07	0.07	0.00	10.45	10.45	0.00	10.55	10.60
3	10.60	0.07	0.07	0.00	10.45	10.44	-0.06	10.55	10.70

$$Cgas = (Cavg - Co) * Cma / (Cm - Co) \qquad \text{Eq. 6C-1}$$

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
Mid Load

Date: 12/9/2010
Pollutant: O2
Monitor Span: 22.5

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	9.03	0.29	0.18	-0.49	11.06	10.90	-0.71	10.99	9.00
2	9.01	0.18	0.14	-0.18	10.90	10.86	-0.18	10.99	9.10
3	8.82	0.14	0.14	0.00	10.86	10.86	0.00	10.99	8.90

$$Cgas = (Cavg - Co) * Cma / (Cm - Co) \qquad \text{Eq. 6C-1}$$

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

GRACE CONSULTING, INC.

H2SO4 Analysis

Hoosier Energy
Merom Station
Unit 1 Stack
10-480

Run Number			1	2	3
Date			12/10/2010	12/10/2010	12/10/2010
Location			Unit 1 Stack	Unit 1 Stack	Unit 1 Stack
Comment			Low Load	Low Load	Low Load
Start Time			0:05	1:10	2:20
End Time			1:05	2:10	3:20
Barometric Pressure	In. Hg.	Pb	29.66	29.66	29.66
Volume Sampled	dcf	Vm	21.179	21.005	21.071
Meter Correction Factor		Y	0.99	0.99	0.99
Orifice Pressure	In. H2O		0.42	0.42	0.42
Meter Temperature	Degree F		58.0	62.0	62.0
Percent O2	%		9.9	9.8	9.8
Sample Time	min.		60	60	60
Volume of Solution	ml		81.5	97.5	91.5
Volume of Aliquot	ml		10	10	10
Normality of Barium	N		0.0091	0.0091	0.0091
Volume toTitrate Blank	ml		0.00	0.00	0.00
Volume to Titrate sample	ml		8.15	8.65	9.80
F-Factor			9,780	9,780	9,780
Corrected Sample Volume	dscf	Vms	21.21	20.87	20.94
H2SO4 Concentration	lb/dscf		3.08E-06	3.97E-06	4.21E-06
H2SO4 Concentration	ppm dry		12.13	15.65	16.59
H2SO4 Emissions	lb/mmBtu		0.057	0.073	0.078

Averages:				
		H2SO4 Emissions:	lb/dscf	3.76E-06
			ppm dry	14.79
Percent O2:	9.83 %		lb/mmBtu	0.069

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
Low Load

Date: 12/9-10/2010
Pollutant: CO2
Monitor Span: 18.1

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	9.78	0.07	0.08	0.06	10.49	10.37	-0.66	10.55	9.90
2	9.77	0.08	0.08	0.00	10.37	10.37	0.00	10.55	9.90
3	9.77	0.08	0.08	0.00	10.37	10.38	0.06	10.55	9.90

Cgas = (Cavg - Co) * Cma / (Cm - Co) Eq. 6C-1

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

Grace Consulting, Inc.

Sampling System Bias Check and Measured Value Correction

Hoosier Energy
Merom Station - Unit 1 Stack
Low Load

Date: 12/9-10/2010
Pollutant: O2
Monitor Span: 22.5

Run Number	Average Measured Percent	Initial Zero Gas Bias	Final Zero Gas Bias	Zero Gas Drift	Initial Upscale Gas Bias	Final Upscale Gas Bias	Upscale Gas Drift	Calibration Gas	Corrected Percent, Dry Basis
1	9.75	0.14	0.09	-0.22	10.86	10.82	-0.18	10.99	9.90
2	9.65	0.09	0.09	0.00	10.82	10.82	0.00	10.99	9.80
3	9.65	0.09	0.10	0.04	10.82	10.79	-0.13	10.99	9.80

$$Cgas = (Cavg - Co) * Cma / (Cm - Co) \qquad \text{Eq. 6C-1}$$

where:
Cgas = Effluent gas concentration, dry basis, percent
Cavg = Average gas concentration indicated by gas analyzer, dry basis, percent
Co = Average of initial and final system calibration bias check responses for the zero gas, percent
Cm = Average of initial and final system calibration bias check responses for the upscale calibration gas, percent
Cma = Actual concentration of the upscale calibration gas, percent

Test Methods used at Hoosier Energy - Merom Station, Unit 1

Method 3A

CO_2 and O_2 concentrations were determined with 3 Method 3A test runs that corresponded with the H_2SO_4 tests. The sampling was performed at 3- points. GCI used a monitor range of 0-18.1% for CO_2 and a monitor range of 0-22.5% for the O_2.

Method 8A

GCI performed 3 NCASI Method 8A test runs on the High, Mid and Low Loads using Apex Instruments test equipment. The USEPA test procedures were followed as written with 12 test point sampled for 5 minutes. Meter Box 13A was used on the High Load and had a meter correction factor of .976. Meter Box 19AO was used on the Mid and Low Loads and had a meter correction factor of .990.

APPENDIX

H_2SO_4 CALCULATION

lb/dscf = .0001081 x (Normality of Barium x (Volume to Titrate Sample – Volume to Titrate Blank) x (Volume of Solution /Volume of Aliquot) ÷ dscf

PPM dry = lb/dscf ÷ .000000254

lb/mmBtu = (lb/dscf x f-factor x 20.9) ÷ (20.9 – O_2 %)

Field Data Sheet
Method 8A

Client: Hoosier		Date: 12-7-10	
Project No: 10-480	Operator: D. Moody		
Sampling Location: Unit 1 Stack		Run No: 1	
Barometric Pressure: 29.62	Impinger Box No:	Condensate: 77.5 ml or g	
Meter Corr.Factor: .976	Meter Orifice: 2.8007	Silica Gel: 8.5 g	
Sample Pt. Time: 5m/pt	Delta H@: 1.772	Meter No. 13A	
Assumed % Moisture:		Date Calibrated: 11-30-10	

Orsat Analysis		
CO_2%	+O_2	O_2%
12.06		7.42

RM: 8A

Flue Area: ft.^{2}

Saturated Gas Stream: Y or N

Leak Test Initial: .000 ft^3 @ 15 "Hg (1 min.) Final: .000 ft^3 @ 7 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 7:05										Initial DGM Reading:	521.300
1	.45			501	506	45	168		50	5	533.070
2	.43			501	503	46	171		48	5	534.810
3	.45			500	510	46	170		51	5	536.553
4	.45			505	511	50	168		52	3	538.310
5	.42			510	510	52	169		53	4	540.025
6	.41			499	503	52	170		54	4	541.800
7	.40			501	506	55	171		53	3	543.551
8	.40			500	507	56	170		55	3	545.283
9	.41			501	508	57	168		55	3	547.030
10	.41			506	507	58	169		55	4	548.786
11	.41			507	506	59	168		55	4	550.540
12	.42			500	500	59	169		53	4	552.335
Stop Time: 8:05											
avg's.	.42								53		21.035

Field Data Sheet
Method 8A

Client: Hoosier Marion		Date: 12-7-10	
Project No: 10-450	Operator: DMoore		
Sampling Location: Unit 1		Run No: 2	
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 74 ml or g	
Meter Corr.Factor: .974	Meter Orifice: 2.8007	Silica Gel: g	
Sample Pt. Time: 5 min 1 Hr	Delta H@: 1.772	Meter No. 13A	
Assumed % Moisture: 14		Date Calibrated: 11-30	

Orsat Analysis		
CO_2%	+O_2	O_2%
11.60		7.73

RM: 8A
Flue Area: ft.^{2}

Saturated Gas Stream: Y or N | Leak Test Initial: .001 ft^3 @ 17 "Hg (1 min.) | Final: .000 ft^3 @ 7 "Hg (1 min.)

Sample Point	Delta H			Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 9:58									Initial DGM Reading:		553.400
1	.40			511	507	46	170		53	5	555.155
2	.40			512	507	46	171		53	5	556.856
3	.39			511	506	47	172		53	4	558.710
4	.39			506	507	47	170		54	4	560.460
5	.39			511	507	48	170		54	5	562.210
6	.39			509	506	50	170		54	5	563.965
7	.39			509	509	51	171		54	5	565.655
8	.39			507	510	51	170		54	5	567.470
9	.39			507	502	53	168		54	4	569.220
10	.39			504	502	54	168		55	4	571.000
11	.39			504	501	55	167		54	4	572.760
12	.39			502	502	56	168		55	4	574.545
Stop Time: 10:58											
avg's.	.39								54		21.145

Field Data Sheet
Method 8A

Client: Hasire Meron		Date: 12-9-10	
Project No: 10-480	Operator: D Woody		
Sampling Location: Unit 1		Run No: 3	
Barometric Pressure: 29.62	Impinger Box No:	Condensate: 95 ml or g	
Meter Corr.Factor: .976	Meter Orifice: 2.8007	Silica Gel: g	
Sample Pt. Time: 5 min/1 HR	Delta H@: 1.772	Meter No. 13A	
Assumed % Moisture: 15		Date Calibrated: 11-30-10	

Orsat Analysis		
CO_2%	+O_2	O_2%
12.05		7.11

RM: 8A

Flue Area: ft.^{2}

Saturated Gas Stream: Y or N

Leak Test Initial: .0080 ft^3 @ 17 "Hg (1 min.) Final: .000 ft^3 @ 7 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 12:54									Initial DGM Reading:		574.700
1	.39			509	511	53	172		53	4	576.460
2	.39			509	503	47	171		52	4	578.210
3	.39			509	504	47	170		52	4	579.945
4	.39			509	506	47	169		52	4	581.700
5	.39			508	505	49	170		52	4	583.445
6	.39			508	505	49	170		53	4	585.195
7	.39			505	505	48	168		53	4	586.960
8	.39			506	507	48	168		53	4	588.690
9	.39			503	505	49	167		54	4	590.400
10	.40			504	505	52	168		54	4	592.190
11	.40			504	506	55	167		55	4	593.965
12	.40			505	507	57	170		56	4	595.685
Stop Time: 1:54											
avg's.	.39								53		20.985

Test Run 1 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1 stack

		O2 %	CO2 %
Start Averaging			
12/7/2010	19:06:51	7.526	11.859
12/7/2010	19:07:52	7.816	11.503
12/7/2010	19:08:53	7.983	11.543
12/7/2010	19:09:51	7.853	11.58
12/7/2010	19:10:52	7.676	11.833
12/7/2010	19:11:52	7.6	11.828
12/7/2010	19:12:51	7.58	11.704
12/7/2010	19:13:51	7.732	11.702
12/7/2010	19:14:52	7.754	11.683
12/7/2010	19:15:53	7.685	11.73
12/7/2010	19:16:51	7.794	11.633
12/7/2010	19:17:52	7.853	11.501
12/7/2010	19:18:52	7.729	11.874
12/7/2010	19:19:51	7.693	11.513
12/7/2010	19:20:51	7.789	11.811
12/7/2010	19:21:52	7.622	11.681
12/7/2010	19:22:53	7.813	11.634
12/7/2010	19:23:51	7.759	11.782
12/7/2010	19:24:52	7.589	11.793
12/7/2010	19:25:52	7.504	12.04
12/7/2010	19:26:51	7.269	11.978
12/7/2010	19:27:51	7.557	11.792
12/7/2010	19:28:52	7.719	11.608
12/7/2010	19:29:53	7.86	11.621
12/7/2010	19:30:51	7.798	11.521
12/7/2010	19:31:52	8.011	11.598
12/7/2010	19:32:52	7.733	11.712
12/7/2010	19:33:51	7.711	11.743
12/7/2010	19:34:51	7.581	11.818
12/7/2010	19:35:52	7.654	11.675
Pause			
12/7/2010	19:36:53	7.944	11.466
12/7/2010	19:37:51	7.862	11.677
12/7/2010	19:38:52	8.105	7.611
12/7/2010	19:39:52	18.812	0.142
12/7/2010	19:40:51	20.669	0.137
12/7/2010	19:41:52	20.741	0.124
12/7/2010	19:42:52	14.878	10.706
12/7/2010	19:43:53	8.159	11.433
End Pause			

12/7/2010	19:44:51	7.99	11.56
12/7/2010	19:45:52	7.869	11.71
12/7/2010	19:46:52	7.784	11.639
12/7/2010	19:47:51	7.769	11.763
12/7/2010	19:48:52	7.779	11.71
12/7/2010	19:49:52	7.891	11.46
12/7/2010	19:50:53	7.993	11.58
12/7/2010	19:51:51	7.496	12.082
12/7/2010	19:52:52	7.41	12.068
12/7/2010	19:53:52	7.226	11.955
12/7/2010	19:54:51	7.812	11.68
12/7/2010	19:55:52	7.348	12.084
12/7/2010	19:56:52	7.691	11.585
12/7/2010	19:57:53	7.589	11.977
12/7/2010	19:58:51	7.446	11.885
12/7/2010	19:59:52	7.389	12.072
12/7/2010	20:00:52	7.467	11.907
12/7/2010	20:01:51	7.507	11.758
12/7/2010	20:02:52	7.707	11.82
12/7/2010	20:03:52	7.541	11.894
12/7/2010	20:04:53	7.469	11.878
12/7/2010	20:05:51	7.473	11.939
12/7/2010	20:06:52	7.478	11.9
12/7/2010	20:07:52	7.482	11.888
12/7/2010	20:08:51	7.747	11.577
12/7/2010	20:09:52	7.696	11.838
12/7/2010	20:10:52	7.383	11.963
12/7/2010	20:11:53	7.648	11.676
12/7/2010	20:12:51	7.632	11.87
12/7/2010	20:13:52	7.51	11.847
Pause			
12/7/2010	20:14:53	7.7	11.705
12/7/2010	20:15:51	7.726	11.593
12/7/2010	20:16:52	7.813	11.724
12/7/2010	20:17:52	13.87	1.736
12/7/2010	20:18:53	13.1	11.061
12/7/2010	20:19:51	8.396	11.226
End Pause			
12/7/2010	20:20:52	8.231	11.33
12/7/2010	20:21:53	8.094	11.251
12/7/2010	20:22:51	8.492	11.014
12/7/2010	20:23:52	8.253	11.297
12/7/2010	20:24:52	8.151	11.321
12/7/2010	20:25:51	8.302	11.132
12/7/2010	20:26:51	8.192	11.375
12/7/2010	20:27:52	8.039	11.419
12/7/2010	20:28:53	8.146	11.245

12/7/2010	20:29:51	8.065	11.552
12/7/2010	20:30:52	7.965	11.345
12/7/2010	20:31:52	8.207	11.312
12/7/2010	20:32:51	7.969	11.464
12/7/2010	20:33:51	8.058	11.473
12/7/2010	20:34:52	7.986	11.343
12/7/2010	20:35:53	8.121	11.431
12/7/2010	20:36:51	7.9	11.487
12/7/2010	20:37:52	8.125	11.316
12/7/2010	20:38:52	8.006	11.492
12/7/2010	20:39:51	8.06	11.357
12/7/2010	20:40:51	8.076	11.369
12/7/2010	20:41:52	8.051	11.412
12/7/2010	20:42:53	8.081	11.452
12/7/2010	20:43:51	7.837	11.59
12/7/2010	20:44:52	7.942	11.401
12/7/2010	20:45:52	8.063	11.392
12/7/2010	20:46:51	7.924	11.674
12/7/2010	20:47:51	7.843	11.492
12/7/2010	20:48:52	7.867	11.512
12/7/2010	20:49:53	8.05	11.397
Pause			
12/7/2010	20:50:51	7.917	11.611
12/7/2010	20:51:52	7.894	11.489
12/7/2010	20:52:52	8.003	8.366
12/7/2010	20:53:51	17.919	3.925
12/7/2010	20:54:51	10.047	11.483
12/7/2010	20:55:52	7.901	11.625
End Pause			
12/7/2010	20:56:53	7.74	11.668
12/7/2010	20:57:51	7.854	11.572
12/7/2010	20:58:52	8.011	11.424
12/7/2010	20:59:52	7.98	11.427
12/7/2010	21:00:51	8.151	11.25
12/7/2010	21:01:51	8.225	11.287
12/7/2010	21:02:52	8.087	11.392
12/7/2010	21:03:53	8.112	11.315
12/7/2010	21:04:51	8.093	11.411
12/7/2010	21:05:52	7.937	11.529
12/7/2010	21:06:52	7.894	11.549
12/7/2010	21:07:51	7.955	11.485
12/7/2010	21:08:52	7.998	11.503
12/7/2010	21:09:52	7.797	11.647
12/7/2010	21:10:53	7.767	11.628
12/7/2010	21:11:51	7.888	11.495
12/7/2010	21:12:52	8	11.484
12/7/2010	21:13:52	7.875	11.548

12/7/2010	21:14:51	7.918	11.52
12/7/2010	21:15:52	7.884	11.521
12/7/2010	21:16:52	7.86	11.563
12/7/2010	21:17:53	7.991	11.415
12/7/2010	21:18:51	7.99	11.497
12/7/2010	21:19:52	7.995	11.365
12/7/2010	21:20:52	8.008	11.506
12/7/2010	21:21:51	7.891	11.541
12/7/2010	21:22:52	7.945	11.417
12/7/2010	21:23:52	8.08	11.306
12/7/2010	21:24:53	8.13	11.342
12/7/2010	21:25:51	8.169	11.124
Average		**7.84**	**11.59**

Test Run 1 End

Test Run 2 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1 stack

		O2 %	CO2 %
Start Averaging			
12/7/2010	22:04:50	7.948	11.524
12/7/2010	22:05:50	7.987	11.441
12/7/2010	22:06:51	8.008	11.338
12/7/2010	22:07:51	8.185	11.348
12/7/2010	22:08:50	7.826	11.647
12/7/2010	22:09:51	7.907	11.541
12/7/2010	22:10:51	7.853	11.548
12/7/2010	22:11:50	7.906	11.491
12/7/2010	22:12:50	8.079	11.348
12/7/2010	22:13:51	7.924	11.506
12/7/2010	22:14:51	7.995	11.371
12/7/2010	22:15:50	8.007	11.254
12/7/2010	22:16:51	8.003	11.194
12/7/2010	22:17:51	7.999	11.093
12/7/2010	22:18:50	7.996	10.903
Pause			
12/7/2010	22:19:50	7.991	10.41
12/7/2010	22:20:51	7.983	8.724
12/7/2010	22:21:49	7.978	6
12/7/2010	22:22:50	7.972	3.756
12/7/2010	22:23:51	7.968	2.392
12/7/2010	22:24:51	7.967	1.642
12/7/2010	22:25:50	7.967	1.198
12/7/2010	22:26:50	7.969	0.937
12/7/2010	22:27:51	7.976	0.803
12/7/2010	22:28:49	7.989	0.725
12/7/2010	22:29:50	8.015	0.667
12/7/2010	22:30:51	8.061	0.62
12/7/2010	22:31:51	8.138	0.58
12/7/2010	22:32:50	8.251	0.548
12/7/2010	22:33:50	8.412	0.521
12/7/2010	22:34:51	8.623	0.498
12/7/2010	22:35:49	8.878	0.478
12/7/2010	22:36:50	9.175	0.459
12/7/2010	22:37:51	9.518	0.444
12/7/2010	22:38:51	9.884	0.429
12/7/2010	22:39:50	10.27	0.416
12/7/2010	22:40:50	10.669	0.402
12/7/2010	22:41:51	17.02	0.193

12/7/2010	22:42:50	20.7	0.153
12/7/2010	22:43:50	20.798	0.153
12/7/2010	22:44:51	20.762	0.196
12/7/2010	22:45:50	20.736	0.162
12/7/2010	22:46:50	20.732	0.205
12/7/2010	22:47:51	20.737	0.222
12/7/2010	22:48:51	20.747	0.158
12/7/2010	22:49:50	20.809	0.155
12/7/2010	22:50:50	20.814	0.155
12/7/2010	22:51:51	20.819	0.154
12/7/2010	22:52:50	20.825	0.154
12/7/2010	22:53:50	20.83	0.153
12/7/2010	22:54:51	20.834	0.154
12/7/2010	22:55:51	20.834	0.154
12/7/2010	22:56:50	20.831	0.155
12/7/2010	22:57:51	20.829	0.155
12/7/2010	22:58:51	20.831	0.155
12/7/2010	22:59:50	20.829	0.155
12/7/2010	23:00:50	20.829	0.156
12/7/2010	23:01:51	20.829	0.156
12/7/2010	23:02:51	20.828	0.156
12/7/2010	23:03:50	20.834	1.755
12/7/2010	23:04:51	12.832	9.773
12/7/2010	23:05:51	9.36	10.36
End Pause			
12/7/2010	23:06:50	9.165	11.343
12/7/2010	23:07:50	9.103	11.286
12/7/2010	23:08:51	8.924	11.365
12/7/2010	23:09:51	8.691	11.772
12/7/2010	23:10:51	8.136	11.84
12/7/2010	23:11:50	8.407	11.523
12/7/2010	23:12:50	8.596	11.515
12/7/2010	23:13:51	8.403	11.589
12/7/2010	23:14:51	8.483	11.516
12/7/2010	23:15:50	8.522	11.428
12/7/2010	23:16:50	9.042	10.428
12/7/2010	23:17:51	9.963	10.394
12/7/2010	23:18:49	9.909	10.623
12/7/2010	23:19:50	9.908	10.058
12/7/2010	23:20:51	9.906	10.045
12/7/2010	23:21:51	9.909	10.03
12/7/2010	23:22:50	9.909	10.017
12/7/2010	23:23:50	9.91	10.003
12/7/2010	23:24:51	9.913	10.989
12/7/2010	23:25:49	9.916	10.177
12/7/2010	23:26:50	10.262	10.939
12/7/2010	23:27:51	10.326	10.784

12/7/2010	23:28:51	9.539	10.914
12/7/2010	23:29:50	9.478	10.386
12/7/2010	23:30:50	9.517	11.009
12/7/2010	23:31:51	9.05	11.101
12/7/2010	23:32:50	8.947	11.173
12/7/2010	23:33:50	8.991	11.038
12/7/2010	23:34:51	8.842	11.293
12/7/2010	23:35:51	8.792	11.159
12/7/2010	23:36:50	8.972	11.068
12/7/2010	23:37:50	8.971	11.047
12/7/2010	23:38:51	9.056	10.98
12/7/2010	23:39:50	9.057	10.882
12/7/2010	23:40:50	8.801	11.54
12/7/2010	23:41:51	8.318	11.591
12/7/2010	23:42:51	8.314	11.694
12/7/2010	23:43:50	8.147	11.77
12/7/2010	23:44:50	8.148	11.741
12/7/2010	23:45:51	8.162	11.755
12/7/2010	23:46:50	8.183	11.739
12/7/2010	23:47:50	8.097	11.836
12/7/2010	23:48:51	8.111	11.81
12/7/2010	23:49:51	8.046	11.804
12/7/2010	23:50:50	8.104	11.754
12/7/2010	23:51:51	8.104	10.934
12/7/2010	23:52:51	7.939	11.005
12/7/2010	23:53:50	7.997	10.992
12/7/2010	23:54:50	7.858	11.057
12/7/2010	23:55:51	7.954	10.906
12/7/2010	23:56:51	8.08	10.873
12/7/2010	23:57:50	7.959	10.983
12/7/2010	23:58:51	7.974	10.859
12/7/2010	23:59:51	8.065	10.824
12/8/2010	0:00:50	8.228	10.668
12/8/2010	0:01:50	8.292	10.647
12/8/2010	0:02:51	8.515	10.255
12/8/2010	0:03:51	8.742	10.287
12/8/2010	0:04:50	8.648	10.336
12/8/2010	0:05:51	8.639	10.428
12/8/2010	0:06:51	8.512	10.425
12/8/2010	0:07:50	8.504	10.531
12/8/2010	0:08:50	8.461	10.495
12/8/2010	0:09:51	8.407	10.757
12/8/2010	0:10:49	8.196	10.605
12/8/2010	0:11:50	8.349	10.65
12/8/2010	0:12:51	8.286	10.674
12/8/2010	0:13:51	8.238	10.699
12/8/2010	0:14:50	8.334	10.659

12/8/2010	0:15:50	8.2	10.855
12/8/2010	0:16:51	8.065	10.824
12/8/2010	0:17:49	8.291	10.655
12/8/2010	0:18:50	8.294	10.709
12/8/2010	0:19:51	8.232	10.742
12/8/2010	0:20:51	8.272	10.668
12/8/2010	0:21:50	8.408	10.533
12/8/2010	0:22:50	8.393	10.53
12/8/2010	0:23:51	8.631	10.084
12/8/2010	0:24:49	9.245	10.785
12/8/2010	0:25:50	9.209	10.92
12/8/2010	0:26:51	9.1	10.961
12/8/2010	0:27:51	9.015	11.09
12/8/2010	0:28:50	8.972	11.147
12/8/2010	0:29:50	8.908	11.134
Test Run 2 End Average		**8.61**	**11.00**

Test Run 3 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1 stack

		O2 %	CO2 %
Start Averaging			
12/8/2010	0:56:32	7.524	11.575
12/8/2010	0:57:32	7.438	11.579
12/8/2010	0:58:33	7.484	11.455
12/8/2010	0:59:34	7.554	11.596
12/8/2010	1:00:32	7.349	11.665
12/8/2010	1:01:33	7.311	11.65
12/8/2010	1:02:33	7.293	11.836
12/8/2010	1:03:32	7.102	11.849
12/8/2010	1:04:32	7.162	11.811
12/8/2010	1:05:33	7.111	11.838
12/8/2010	1:06:34	7.226	11.784
12/8/2010	1:07:32	7.195	11.766
12/8/2010	1:08:33	7.231	11.749
12/8/2010	1:09:33	7.173	11.843
12/8/2010	1:10:33	7.171	11.835
12/8/2010	1:11:32	7.155	11.763
12/8/2010	1:12:33	7.33	11.667
12/8/2010	1:13:33	7.282	11.756
12/8/2010	1:14:34	7.269	11.793
12/8/2010	1:15:32	7.139	11.885
12/8/2010	1:16:33	7.106	11.882
12/8/2010	1:17:33	7.072	11.919
12/8/2010	1:18:34	7.27	11.597
12/8/2010	1:19:32	7.433	11.691
12/8/2010	1:20:32	7.308	11.704
12/8/2010	1:21:33	7.238	11.762
12/8/2010	1:22:33	7.356	11.656
12/8/2010	1:23:32	7.319	11.813
12/8/2010	1:24:33	7.099	11.857
12/8/2010	1:25:33	7.249	11.641
12/8/2010	1:26:32	7.424	11.642
12/8/2010	1:27:32	7.294	11.758
12/8/2010	1:28:33	7.3	11.654
12/8/2010	1:29:33	7.225	11.784
12/8/2010	1:30:32	7.246	11.778
12/8/2010	1:31:33	7.26	11.666
12/8/2010	1:32:33	7.396	11.629
12/8/2010	1:33:34	7.296	11.555
12/8/2010	1:34:32	7.482	11.282

Pause

12/8/2010	1:35:33	7.532	10.887
12/8/2010	1:36:33	7.558	7.989
12/8/2010	1:37:34	7.572	3.047
12/8/2010	1:38:32	7.588	1.164
12/8/2010	1:39:33	7.636	0.548
12/8/2010	1:40:33	7.865	0.463
12/8/2010	1:41:32	8.64	0.436
12/8/2010	1:42:32	9.31	0.548
12/8/2010	1:43:33	9.37	0.51
12/8/2010	1:44:33	9.435	0.565
12/8/2010	1:45:32	9.499	0.588
12/8/2010	1:46:33	9.561	0.617
12/8/2010	1:47:33	9.622	0.645
12/8/2010	1:48:32	9.682	0.674
12/8/2010	1:49:32	9.742	0.701
12/8/2010	1:50:33	9.803	0.729
12/8/2010	1:51:33	9.864	0.759
12/8/2010	1:52:32	9.924	0.793
12/8/2010	1:53:33	10.511	1.718
12/8/2010	1:54:33	19.051	17.194
12/8/2010	1:55:32	20.939	14.19
12/8/2010	1:56:32	20.967	6.447
12/8/2010	1:57:33	20.957	8.798
12/8/2010	1:58:33	20.949	9.755
12/8/2010	1:59:32	20.948	9.709
12/8/2010	2:00:33	20.946	9.666
12/8/2010	2:01:33	20.944	9.622
12/8/2010	2:02:32	20.941	9.58
12/8/2010	2:03:32	20.937	9.536
12/8/2010	2:04:33	20.934	9.478
12/8/2010	2:05:33	20.931	9.419
12/8/2010	2:06:32	20.926	9.34
12/8/2010	2:07:33	20.921	9.26
12/8/2010	2:08:33	20.916	9.174
12/8/2010	2:09:32	20.909	9.085
12/8/2010	2:10:32	20.905	8.984
12/8/2010	2:11:33	20.897	8.899
12/8/2010	2:12:34	20.889	8.814
12/8/2010	2:13:32	20.881	8.727
12/8/2010	2:14:33	20.876	8.631
12/8/2010	2:15:33	20.868	8.548
12/8/2010	2:16:32	20.859	8.495
12/8/2010	2:17:32	20.852	8.407
12/8/2010	2:18:33	20.843	8.322
12/8/2010	2:19:34	20.835	8.269
12/8/2010	2:20:32	20.827	8.213

12/8/2010	2:21:33	20.818	8.164
12/8/2010	2:22:33	20.81	8.124
12/8/2010	2:23:32	20.802	8.092
12/8/2010	2:24:32	20.794	8.055
12/8/2010	2:25:33	20.786	8.031
12/8/2010	2:26:34	20.777	8.006
12/8/2010	2:27:32	20.768	7.975
12/8/2010	2:28:33	20.761	7.944
12/8/2010	2:29:33	20.75	7.924
12/8/2010	2:30:32	20.744	7.91
12/8/2010	2:31:32	20.737	7.898
12/8/2010	2:32:33	20.729	7.889
12/8/2010	2:33:34	20.72	7.878
12/8/2010	2:34:32	20.711	7.867
12/8/2010	2:35:33	20.705	7.861
12/8/2010	2:36:33	20.695	7.855
12/8/2010	2:37:33	20.689	7.847
12/8/2010	2:38:33	20.682	7.841
12/8/2010	2:39:32	20.674	7.837
Average			
Test Run 3 End		**7.28**	**11.72**

167-135

Field Data Sheet
Method 8A

Client: Hoosier Maroon		Date: 12-9-10	Orsat Analysis		
Project No: 10-480	Operator: Steve T.		CO_2%	+O_2	O_2%
Sampling Location: Unit 1 Stack		Run No: 1			
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 95 ml or g	10.58		9.0
Meter Corr.Factor: .990	Meter Orifice: 3, 10/89	Silica Gel: g			
Sample Pt. Time: 5min.	Delta H@: 1.86	Meter No. 19A2			
Assumed % Moisture: 14%		Date Calibrated: 10-5-10	RM: 8A		
			Flue Area: ft.^{2}		

Saturated Gas Stream: Y or N | Leak Test Initial: .000 ft^3 @ 15 "Hg (1 min.) | Final: .000 ft^3 @ 8 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: [redacted] 16:00										Initial DGM Reading:	258.146
A1	.40			532	529	50	169	5	3	5	259.83
2	.40			532	533	51	170	5	3	5	261.52
3	.40			533	535	52	172	5	3	5	263.29
4	.40			532	535	52	171	5	4	5	265.07
5	.40			536	538	52	173	5	4	5	266.86
6	.40			537	540	52	175	5	4	5	268.59
7	.41			536	542	52	177	5	4	5	270.31
8	.42			534	540	53	176	5	4	5	272.15
9	.42			531	544	53	175	5	4	5	273.87
10	.42			529	541	53	174	5	4	5	275.63
11	.42			533	537	53	172	5	4	5	277.35
12	.42			532	534	54	172	5	5	5	279.147
Stop Time: 17:00											
avg's.	.41							5	4		21.001

Field Data Sheet
Method 8A

Client: Hoosier Metom		Date: 12-9-10	Orsat Analysis
Project No: 10-480	Operator: Steve T.		CO_2% / $+O_2$ / O_2%
Sampling Location: Unit 1 Stack		Run No: 2	
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 75 ml or g	10.60 / 9.07
Meter Corr.Factor: .990	Meter Orifice: 3.10189	Silica Gel: g	
Sample Pt. Time: 5min	Delta $H_@$: 1.8886	Meter No. 19A0	
Assumed % Moisture: 14%		Date Calibrated: 10-5-10	RM:
			Flue Area: ft.^{2}

Saturated Gas Stream: Y or N | Leak Test Initial: .000 ft^3 @ 15 "Hg (1 min.) | Final: .000 ft^3 @ 9 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 17:20											
									Initial DGM Reading:		280.274
A1	.42			540	534	53	173	5	5	5	282.05
2	.42			537	534	52	175	5	5	5	283.79
3	.42			537	535	54	174	5	7	5	285.48
4	.42			535	535	55	172	5	8	5	287.15
5	.42			534	536	56	172	5	8	5	288.93
6	.42			535	536	56	171	5	8	5	290.61
7	.42			538	534	57	172	5	9	5	292.46
8	.42			539	534	57	173	5	9	5	294.16
9	.42			537	534	58	174	6	0	5	295.95
10	.42			537	535	58	176	6	0	5	297.78
11	.42			538	532	58	175	6	0	5	299.43
12	.42			538	534	59	175	6	1	5	301.137
Stop Time: 19:20											
avg's.	.42							5	8		20.863

Field Data Sheet
Method 8A

Client: Hoosier MeoM			Date: 12-9-10	Orsat Analysis	
Project No: 10480	Operator: Steve T			CO_2% / $+O_2$	O_2%
Sampling Location: Unit 1 Stack			Run No: 3		
Barometric Pressure: 29.66	Impinger Box No:		Condensate: 84 ml or g	10.72	8.90
Meter Corr.Factor: .990	Meter Orifice: 3/0189		Silica Gel: g		
Sample Pt. Time: 5min	Delta H@: 1.886		Meter No. 1940		
Assumed % Moisture: 14%			Date Calibrated: 10-5-10	RM:	
				Flue Area: ft.^{2}	
Saturated Gas Stream: Y or N	Leak Test Initial: .000 ft^3 @ 15 "Hg (1 min.)		Final: .000 ft^3 @ 8 "Hg (1 min.)		

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 18:36									Initial DGM Reading:		307.262
A1	.42			541	535	52	175	6	0	5	309.09
2	.42			538	536	48	176	6	1	5	310.82
3	.42			535	534	47	175	6	1	5	312.65
4	.42			536	535	47	174	6	2	5	314.43
5	.42			536	532	48	173	6	2	5	316.25
6	.42			537	534	48	172	6	2	5	318.03
7	.42			536	534	49	172	6	2	5	319.87
8	.42			535	537	49	171	6	3	5	321.64
9	.42			537	539	49	171	6	3	5	323.38
10	.42			535	541	49	170	6	3	5	325.05
11	.42			536	539	49	171	6	3	5	326.82
12	.42			539	537	50	171	6	3	5	328.561
Stop Time: 19:36											
avg's.	.42								62		21.299

Test Run 1 Begin. STRATA Version 2.0
Operator: hes
Plant Nam Merom
Location: Unit 1&2 stacks

		O2 %	CO2 %
Start Averaging			
12/9/2010	16:01:47	8.092	11.389
12/9/2010	16:02:47	8.161	11.182
12/9/2010	16:03:48	8.245	11.229
12/9/2010	16:04:46	8.298	11.184
12/9/2010	16:05:47	8.094	11.479
12/9/2010	16:06:48	8.079	11.176
12/9/2010	16:07:48	8.431	11.073
12/9/2010	16:08:47	8.273	11.248
12/9/2010	16:09:47	8.215	11.23
12/9/2010	16:10:48	8.277	11.168
12/9/2010	16:11:46	8.383	11.108
12/9/2010	16:12:47	8.327	11.097
12/9/2010	16:13:48	8.528	11.001
12/9/2010	16:14:48	8.314	11.21
12/9/2010	16:15:47	8.213	11.247
12/9/2010	16:16:47	8.294	11.126
12/9/2010	16:17:48	8.307	11.242
12/9/2010	16:18:46	8.275	11.149
12/9/2010	16:19:47	8.224	11.211
12/9/2010	16:20:48	8.277	11.211
12/9/2010	16:21:46	8.063	11.446
12/9/2010	16:22:47	8.1	11.276
12/9/2010	16:23:47	8.15	11.344
12/9/2010	16:24:48	8.044	11.395
12/9/2010	16:25:46	8.062	11.375
12/9/2010	16:26:47	8.14	11.338
12/9/2010	16:27:48	8.083	11.323
12/9/2010	16:28:46	8.176	11.291
12/9/2010	16:29:47	8.158	11.378
12/9/2010	16:30:47	8.068	11.369
Average	**Unit 2**	**8.21**	**11.25**
Pause			
12/9/2010	16:31:48	7.99	11.551
12/9/2010	16:32:46	7.989	11.347
12/9/2010	16:33:47	8.059	11.418
12/9/2010	16:34:48	10.153	8.994
12/9/2010	16:35:46	9.075	10.625
12/9/2010	16:36:47	9.025	10.488
End Pause			
12/9/2010	16:37:47	8.902	10.694
12/9/2010	16:38:48	8.848	10.561
12/9/2010	16:39:46	8.958	10.642
12/9/2010	16:40:47	8.869	10.605
12/9/2010	16:41:48	8.929	10.581

12/9/2010	16:42:46	8.937	10.504
12/9/2010	16:43:47	9.105	10.436
12/9/2010	16:44:47	9.112	10.394
12/9/2010	16:45:48	9.187	10.337
12/9/2010	16:46:46	9.225	10.423
12/9/2010	16:47:47	9.105	10.377
12/9/2010	16:48:48	9.171	10.434
12/9/2010	16:49:46	9.088	10.415
12/9/2010	16:50:47	9.124	10.414
12/9/2010	16:51:47	9.128	10.424
12/9/2010	16:52:48	9.123	10.483
12/9/2010	16:53:47	8.969	10.584
12/9/2010	16:54:47	8.846	10.694
12/9/2010	16:55:48	8.767	10.736
12/9/2010	16:56:46	8.918	10.482
12/9/2010	16:57:47	9.027	10.515
12/9/2010	16:58:47	9.016	10.475
12/9/2010	16:59:48	9	10.587
12/9/2010	17:00:47	8.961	10.463
12/9/2010	17:01:47	8.975	10.581
12/9/2010	17:02:48	9.119	10.39
12/9/2010	17:03:46	9.025	10.56
12/9/2010	17:04:47	9.075	10.364
12/9/2010	17:05:47	9.05	10.488
12/9/2010	17:06:48	9.092	10.455
12/9/2010	17:07:47	9.105	10.36
12/9/2010	17:08:47	9.233	10.392
Average	**Unit 1**	**9.03**	**10.50**

Test Run 1 End

Test Run 2 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1&2 stacks

		O2 %	CO2 %
Start Averaging			
12/9/2010	17:21:05	9.134	10.415
12/9/2010	17:22:06	9.153	10.391
12/9/2010	17:23:06	9.072	10.524
12/9/2010	17:24:05	8.985	10.498
12/9/2010	17:25:06	9.124	10.37
12/9/2010	17:26:06	9.141	10.387
12/9/2010	17:27:05	9.142	10.456
12/9/2010	17:28:05	9.007	10.564
12/9/2010	17:29:06	9.018	10.409
12/9/2010	17:30:06	9.093	10.502
12/9/2010	17:31:05	8.928	10.617
12/9/2010	17:32:06	8.917	10.618
12/9/2010	17:33:06	8.836	10.648
12/9/2010	17:34:05	8.922	10.491
12/9/2010	17:35:05	8.952	10.62
12/9/2010	17:36:06	8.911	10.532
12/9/2010	17:37:07	8.963	10.574
12/9/2010	17:38:05	8.984	10.474
12/9/2010	17:39:06	8.906	10.65
12/9/2010	17:40:06	8.958	10.489
12/9/2010	17:41:05	8.969	10.525
12/9/2010	17:42:05	9.03	10.51
12/9/2010	17:43:06	8.873	10.593
12/9/2010	17:44:07	8.979	10.459
12/9/2010	17:45:05	9.01	10.472
12/9/2010	17:46:05	9.003	10.56
12/9/2010	17:47:06	8.935	10.545
12/9/2010	17:48:06	8.953	10.525
12/9/2010	17:49:05	9.002	10.474
12/9/2010	17:50:06	8.937	10.544
12/9/2010	17:51:06	8.947	10.48
12/9/2010	17:52:07	9.19	10.277
12/9/2010	17:53:05	9.101	10.474
12/9/2010	17:54:06	9.082	10.364
12/9/2010	17:55:06	9.152	10.398
Average	**Unit 1**	**9.01**	**10.50**
Pause			
12/9/2010	17:56:05	9.105	10.406
12/9/2010	17:57:05	9.102	10.437
12/9/2010	17:58:06	9.07	9.128
12/9/2010	17:59:07	10.022	11.378
End Pause			
12/9/2010	18:00:05	7.904	11.559
12/9/2010	18:01:06	8.039	11.257

12/9/2010	18:02:06	8.06	11.386
12/9/2010	18:03:05	7.956	11.564
12/9/2010	18:04:05	7.811	11.457
12/9/2010	18:05:06	8.065	11.316
12/9/2010	18:06:07	7.92	11.502
12/9/2010	18:07:05	7.931	11.496
12/9/2010	18:08:06	7.894	11.368
12/9/2010	18:09:06	8.012	11.475
12/9/2010	18:10:05	7.841	11.538
12/9/2010	18:11:05	7.914	11.345
12/9/2010	18:12:06	8.083	11.452
12/9/2010	18:13:07	7.924	11.423
12/9/2010	18:14:05	7.953	11.426
12/9/2010	18:15:06	7.941	11.469
12/9/2010	18:16:06	7.85	11.656
12/9/2010	18:17:05	7.599	11.722
12/9/2010	18:18:05	7.95	11.224
12/9/2010	18:19:06	8.163	11.334
12/9/2010	18:20:07	8.012	11.444
12/9/2010	18:21:05	7.84	11.572
12/9/2010	18:22:06	7.818	11.5
12/9/2010	18:23:06	7.925	11.405
Test Run 2 End			
Average	**Unit 2**	**7.93**	**11.45**

Test Run 3 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1&2 stacks

		O2 %	CO2 %
Start Averaging			
12/9/2010	18:37:05	7.86	11.43
12/9/2010	18:38:05	8.00	11.34
12/9/2010	18:39:04	8.19	11.13
12/9/2010	18:40:04	8.12	11.39
12/9/2010	18:41:05	7.99	11.48
12/9/2010	18:42:03	7.79	11.48
12/9/2010	18:43:04	7.90	11.49
12/9/2010	18:44:05	7.92	11.35
12/9/2010	18:45:05	8.06	11.40
12/9/2010	18:46:04	7.85	11.54
12/9/2010	18:47:04	7.82	11.49
12/9/2010	18:48:05	8.05	11.19
12/9/2010	18:49:04	8.17	11.31
12/9/2010	18:50:04	7.95	11.55
12/9/2010	18:51:05	7.74	11.60
12/9/2010	18:52:05	7.85	11.45
12/9/2010	18:53:04	7.89	11.41
12/9/2010	18:54:04	8.03	11.39
12/9/2010	18:55:05	7.93	11.47
12/9/2010	18:56:04	7.84	11.64
12/9/2010	18:57:04	7.62	11.66
12/9/2010	18:58:05	7.84	11.42
12/9/2010	18:59:05	8.02	11.39
12/9/2010	19:00:04	7.88	11.47
12/9/2010	19:01:04	7.92	11.43
12/9/2010	19:02:05	8.01	11.27
12/9/2010	19:03:04	8.10	11.37
12/9/2010	19:04:04	7.87	11.52
12/9/2010	19:05:05	7.76	11.56
12/9/2010	19:06:03	7.96	11.26
Average	**Unit 2**	**7.93**	**11.43**
Pause			
12/9/2010	19:07:04	9.38	9.64
12/9/2010	19:08:04	9.04	10.66
End Pause			
12/9/2010	19:09:05	8.87	10.51
12/9/2010	19:10:04	8.89	10.66
12/9/2010	19:11:04	8.70	10.75
12/9/2010	19:12:05	8.86	10.44
12/9/2010	19:13:03	8.89	10.63
12/9/2010	19:14:04	8.80	10.63
12/9/2010	19:15:05	8.78	10.65
12/9/2010	19:16:05	8.80	10.62
12/9/2010	19:17:04	8.76	10.66

12/9/2010	19:18:04	8.78	10.60
12/9/2010	19:19:05	8.89	10.59
12/9/2010	19:20:03	8.81	10.63
12/9/2010	19:21:04	8.81	10.66
12/9/2010	19:22:05	8.75	10.66
12/9/2010	19:23:05	8.70	10.64
12/9/2010	19:24:04	8.88	10.54
12/9/2010	19:25:04	8.80	10.69
12/9/2010	19:26:05	8.77	10.59
12/9/2010	19:27:03	8.79	10.65
12/9/2010	19:28:04	8.81	10.62
12/9/2010	19:29:05	8.76	10.62
12/9/2010	19:30:05	8.82	10.59
12/9/2010	19:31:04	8.94	10.47
12/9/2010	19:32:04	8.84	10.70
12/9/2010	19:33:05	8.76	10.61
12/9/2010	19:34:03	8.79	10.58
12/9/2010	19:35:04	8.91	10.48
12/9/2010	19:36:05	8.98	10.45
12/9/2010	19:37:05	8.86	10.60
12/9/2010	19:38:04	8.86	10.60
Test Run 3 End			
Average	**Unit 1**	**8.82**	**10.60**

Field Data Sheet
Method 8A 12-10-10

Client: Hoosier Merom		Date: ~~12-9-10~~	Orsat Analysis
Project No: 10-480	Operator: Steve T		CO_2% / $+O_2$ / O_2%
Sampling Location: Unit 1 Stack		Run No: #1	
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 79 ml or g	
Meter Corr.Factor: .990	Meter Orifice: 310189	Silica Gel: g	
Sample Pt. Time: 5 min.	Delta $H_@$: 1.886	Meter No. 1440	
Assumed % Moisture: 14%		Date Calibrated: 10-5-10	RM:
			Flue Area: ft.^{2}

Saturated Gas Stream: Y or N | Leak Test Initial: .000 ft^3 @ 15 "Hg (1 min.) | Final: .000 ft^3 @ 8 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 12:05										Initial DGM Reading	333.975
A1	.42			529	534	42	172	5	6	5	335.69
2	.42			53[illegible]	532	45	175	5	6	5	337.41
3	.42			534	532	46	175	5	8	5	339.23
4	.42			535	535	47	174	5	8	5	340.95
5	.42			532	531	47	174	5	8	5	342.77
6	.42			534	534	47	173	5	8	5	344.49
7	.42			537	535	48	172	5	9	5	346.32
8	.42			536	535	48	172	5	9	5	348.05
9	.42			533	536	48	171	5	9	5	349.83
10	.42			535	538	48	172	5	9	5	351.57
11	.42			536	539	48	171	5	9	5	353.39
12	.42			534	538	49	170	6	0	5	355.154
Stop Time: 1805											
avg's.	.42							5	8		21.179

Field Data Sheet
Method 8A 12-10-10

Client: Hoosier Marum		Date: ~~12-9-10~~	Orsat Analysis
Project No: 10-480	Operator: Shuck		CO_2% / $+O_2$ / O_2%
Sampling Location: Unit 1 Stack		Run No: 2	
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 93 ml or g	
Meter Corr.Factor: .990	Meter Orifice: 3.10189	Silica Gel: g	
Sample Pt. Time: 5 min	Delta $H_@$: 1.686	Meter No. 19A0	
Assumed % Moisture: 14%		Date Calibrated: 10-5-10	RM:
			Flue Area: ft.^{2}

Saturated Gas Stream: Y or N | Leak Test Initial: .001 ft^3 @ 15 "Hg (1 min.) | Final: .000 ft^3 @ 8 "Hg (1 min.)

Sample Point	Delta H			Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
				Temperature (Degrees Fahrenheit)							
Start Time: 1:10										Initial DGM Reading:	357.188
A1	.42			537	535	47	176	6	2	5	358.84
2	.42			539	536	48	177	6	2	5	360.56
3	.42			540	535	48	177	6	2	5	362.30
4	.42			537	535	48	175	6	2	5	364.12
5	.42			535	538	48	175	6	2	5	365.95
6	.42			537	537	49	174	6	2	5	367.64
7	.42			538	536	49	175	6	2	5	369.42
8	.42			540	535	50	174	6	3	5	371.19
9	.42			539	535	50	174	6	3	5	372.98
10	.42			536	537	50	173	6	3	5	374.[illegible]6 9
11	.42			537	534	50	172	6	3	5	376.41
12	.42			535	534	51	171	6	3	5	378.193
Stop Time: 2:10											
avg's.	.42							6	2		21.005

Field Data Sheet
Method 8A 12-10-10

Client: Hoosier Merom		Date: 12-9-10	Orsat Analysis
Project No: 10-480	Operator: Steve T		CO_2% / $+O_2$ / O_2%
Sampling Location: Unit 1 Stack		Run No: 3	
Barometric Pressure: 29.66	Impinger Box No:	Condensate: 86 ml or g	
Meter Corr.Factor: .990	Meter Orifice: 3/1989	Silica Gel: g	
Sample Pt. Time: 5min.	Delta $H_@$: 1.886	Meter No. 1940	
Assumed % Moisture: 14%		Date Calibrated: 10-5-10	RM:
			Flue Area: ft.^{2}

Saturated Gas Stream: Y or N | Leak Test Initial: .000 ft^3 @15 "Hg (1 min.) | Final: .000 ft^3 @ 9 "Hg (1 min.)

Sample Point	Delta H			Temperature (Degrees Fahrenheit) Filter temp	Probe	Imp.Out <68	Condenser	Meter In	Meter out	Vac. Pr (in.HG)	Dry Gas Meter Reading (Cubic Feet)
Start Time: 2:20										Initial DGM Reading:	380.551
A1	.42			537	532	50	176	6	3	5	382.36
2	.42			540	535	51	175	6	3	5	384.09
3	.42			541	536	51	176	6	3	5	385.81
4	.42			543	535	51	177	6	3	5	387.52
5	.42			543	532	52	176	6	3	5	389.35
6	.42			541	530	52	176	6	2	5	391.08
7	.42			537	533	52	175	6	2	5	392.76
8	.42			539	531	52	174	6	2	5	394.54
9	.42			538	533	53	172	6	2	5	396.36
10	.42			540	531	53	171	6	2	5	398.07
11	.42			541	532	53	170	6	2	5	399.89
12	.42			539	532	53	170	6	2	5	401.622
Stop Time: 3:20											
avg's.	.42							6	2		21.071

Test Run 1 Begin. STRATA Version 2.0
Operator: hes
Plant Name:Merom
Location: Unit 1&2 stacks

	O2 %	CO2 %
Start Averaging		
12-09-2010 23:22:08	9.098	10.396
12-09-2010 23:23:08	8.868	10.573
12-09-2010 23:24:09	8.679	10.675
12-09-2010 23:25:09	8.770	10.531
12-09-2010 23:26:08	8.862	10.479
12-09-2010 23:27:09	8.933	10.399
12-09-2010 23:28:09	9.005	10.392
12-09-2010 23:29:08	9.103	10.332
12-09-2010 23:30:08	8.894	10.566
12-09-2010 23:31:09	8.781	10.568
12-09-2010 23:32:09	8.801	10.551
12-09-2010 23:33:08	8.796	10.609
12-09-2010 23:34:09	8.677	10.665
12-09-2010 23:35:09	8.846	10.466
12-09-2010 23:36:08	8.836	10.548
12-09-2010 23:37:08	8.939	10.356
12-09-2010 23:38:09	9.071	10.429
12-09-2010 23:39:09	8.813	10.558
12-09-2010 23:40:08	8.799	10.584
12-09-2010 23:41:09	8.730	10.644
12-09-2010 23:42:09	8.730	10.554
12-09-2010 23:43:08	8.955	10.313
12-09-2010 23:44:08	9.087	10.393
12-09-2010 23:45:09	8.896	10.522
12-09-2010 23:46:09	8.771	10.572
12-09-2010 23:47:08	8.847	10.474
12-09-2010 23:48:09	8.898	10.484
12-09-2010 23:49:09	8.875	10.479
12-09-2010 23:50:08	8.918	10.476
12-09-2010 23:51:08	8.938	10.430
12-09-2010 23:52:09	8.824	10.579
12-09-2010 23:53:09	8.811	10.547
12-09-2010 23:54:08	8.867	10.493
12-09-2010 23:55:09	8.818	10.528
12-09-2010 23:56:09	8.903	10.394
12-09-2010 23:57:08	9.021	10.442
12-09-2010 23:58:08	8.855	10.525
12-09-2010 23:59:09	8.776	10.618
12-10-2010 00:00:10	8.712	10.601
12-10-2010 00:01:08	8.805	10.483
12-10-2010 00:02:09	8.876	10.427
12-10-2010 00:03:09	8.968	10.446
12-10-2010 00:04:08	8.890	10.464
12-10-2010 00:05:08	8.892	10.482
12-10-2010 00:06:09	8.798	10.651

12-10-2010 00:07:10	8.674	10.627
12-10-2010 00:08:08	10.636	8.382
Average Unit 2	**8.90**	**10.50**
12-10-2010 00:09:09	9.968	9.667
12-10-2010 00:10:09	10.049	9.449
12-10-2010 00:11:08	9.985	9.640
12-10-2010 00:12:08	9.968	9.580
12-10-2010 00:13:09	9.882	9.710
12-10-2010 00:14:10	9.713	9.815
12-10-2010 00:15:08	9.801	9.661
12-10-2010 00:16:09	9.812	9.859
12-10-2010 00:17:09	9.613	9.849
12-10-2010 00:18:08	9.642	9.868
12-10-2010 00:19:08	9.609	9.956
12-10-2010 00:20:09	9.628	9.855
12-10-2010 00:21:10	9.596	9.940
12-10-2010 00:23:00	9.644	9.715
12-10-2010 00:23:59	9.664	9.899
12-10-2010 00:25:00	9.678	9.967
12-10-2010 00:26:00	9.643	9.692
12-10-2010 00:27:01	9.739	9.884
12-10-2010 00:27:59	9.749	9.779
12-10-2010 00:29:00	9.682	9.769
12-10-2010 00:30:00	9.821	9.795
12-10-2010 00:30:59	9.683	9.782
12-10-2010 00:32:00	9.721	9.842
12-10-2010 00:33:00	9.763	9.761
12-10-2010 00:34:01	9.684	9.803
12-10-2010 00:34:59	9.735	9.827
12-10-2010 00:36:00	9.693	9.857
12-10-2010 00:37:00	9.691	9.746
12-10-2010 00:37:59	9.746	9.762
12-10-2010 00:39:00	9.787	9.757
Average Unit 1	**9.75**	**9.78**

Test Run 2 Begin. STRATA Version 2.0
Operator: hes
Plant Name: Merom
Location: Unit 1&2 stacks

		O2 %	CO2 %
Start Averaging			
12/10/2010	0:43:00	9.058	10.418
12/10/2010	0:44:00	8.873	10.568
12/10/2010	0:44:59	8.725	10.6
12/10/2010	0:46:00	8.762	10.574
12/10/2010	0:47:00	8.855	10.369
12/10/2010	0:48:01	8.973	10.533
12/10/2010	0:48:59	8.64	10.733
12/10/2010	0:50:00	8.683	10.589
12/10/2010	0:51:01	8.747	10.523
12/10/2010	0:51:59	8.899	10.388
12/10/2010	0:53:00	9.04	10.346
12/10/2010	0:54:00	8.836	10.629
12/10/2010	0:54:59	8.703	10.547
12/10/2010	0:55:59	8.829	10.443
12/10/2010	0:57:00	8.87	10.511
12/10/2010	0:58:01	8.826	10.458
12/10/2010	0:58:59	8.837	10.481
12/10/2010	1:00:00	8.902	10.423
12/10/2010	1:01:00	8.881	10.458
12/10/2010	1:01:59	8.874	10.46
12/10/2010	1:02:59	8.824	10.55
12/10/2010	1:04:00	8.674	10.558
12/10/2010	1:05:01	8.91	10.363
12/10/2010	1:05:59	8.845	10.561
12/10/2010	1:07:00	8.838	10.423
12/10/2010	1:08:00	8.766	10.693
12/10/2010	1:09:01	8.53	10.704
12/10/2010	1:09:59	8.67	10.467
12/10/2010	1:11:00	9.032	10.268
12/10/2010	1:12:01	8.936	10.511
12/10/2010	1:12:59	8.764	10.561
Average Unit 2		**8.83**	**10.51**
12/10/2010	1:21:52	9.666	9.741
12/10/2010	1:22:52	9.675	9.762
12/10/2010	1:23:51	9.63	9.834
12/10/2010	1:24:51	9.588	9.711
12/10/2010	1:25:52	9.758	9.788
12/10/2010	1:26:50	9.66	9.774
12/10/2010	1:27:51	9.618	9.78
12/10/2010	1:28:52	9.529	9.892

12/10/2010	1:29:52	9.539	9.907
12/10/2010	1:30:51	9.593	9.772
12/10/2010	1:31:51	9.657	9.861
12/10/2010	1:32:52	9.497	9.841
12/10/2010	1:33:50	9.57	9.767
12/10/2010	1:34:51	9.64	9.837
12/10/2010	1:35:52	9.666	9.746
12/10/2010	1:36:52	9.646	9.814
12/10/2010	1:37:51	9.546	9.882
12/10/2010	1:38:51	9.538	9.851
12/10/2010	1:39:52	9.571	9.832
12/10/2010	1:40:50	9.638	9.756
12/10/2010	1:41:51	9.606	9.852
12/10/2010	1:42:52	9.663	9.705
12/10/2010	1:43:52	9.718	9.767
12/10/2010	1:44:51	9.674	9.752
12/10/2010	1:45:51	9.628	9.774
12/10/2010	1:46:52	9.684	9.725
12/10/2010	1:47:50	9.644	9.899
12/10/2010	1:48:51	9.38	9.957
12/10/2010	1:49:52	9.522	9.9
12/10/2010	1:50:52	9.636	9.709
12/10/2010	1:51:51	9.8	9.561
12/10/2010	1:52:51	9.865	9.595
12/10/2010	1:53:52	9.859	9.546
12/10/2010	1:54:50	9.836	9.686
12/10/2010	1:55:51	9.751	9.686
12/10/2010	1:56:52	9.763	9.761
12/10/2010	1:57:52	9.61	9.701
12/10/2010	1:58:51	9.804	9.666
12/10/2010	1:59:51	9.703	9.725
12/10/2010	2:00:52	9.774	9.677
12/10/2010	2:01:51	9.735	9.739
12/10/2010	2:02:51	9.679	9.72
12/10/2010	2:03:52	9.711	9.699
12/10/2010	2:04:52	9.703	9.784
12/10/2010	2:05:51	9.604	9.783
12/10/2010	2:06:51	9.559	9.887
12/10/2010	2:07:52	9.492	9.946
12/10/2010	2:08:51	9.525	9.798
12/10/2010	2:09:51	9.576	9.732
12/10/2010	2:10:52	9.835	9.684
Average Unit 1		**9.65**	**9.77**

Test Run 3 Begin. STRATA Version 2.0

Operator: hes

Plant Name: Merom

Location: Unit 1&2 stacks

		O2 %	CO2 %
Start Averaging			
12/10/2010	2:22:58	9.583	9.862
12/10/2010	2:23:58	9.522	9.817
12/10/2010	2:24:59	9.653	9.749
12/10/2010	2:25:57	9.674	9.71
12/10/2010	2:26:58	9.712	9.776
12/10/2010	2:27:59	9.533	9.885
12/10/2010	2:28:57	9.696	9.687
12/10/2010	2:29:58	9.609	9.805
12/10/2010	2:30:58	9.671	9.783
12/10/2010	2:31:59	9.631	9.798
12/10/2010	2:32:57	9.592	9.763
12/10/2010	2:33:58	9.702	9.78
12/10/2010	2:34:59	9.654	9.718
12/10/2010	2:35:57	9.713	9.803
12/10/2010	2:36:58	9.609	9.76
12/10/2010	2:37:58	9.742	9.711
12/10/2010	2:38:59	9.728	9.648
12/10/2010	2:39:57	9.681	9.767
12/10/2010	2:40:58	9.729	9.757
12/10/2010	2:41:59	9.709	9.578
12/10/2010	2:42:57	9.785	9.737
12/10/2010	2:43:58	9.714	9.72
12/10/2010	2:44:58	9.705	9.783
12/10/2010	2:45:57	9.545	9.87
12/10/2010	2:46:57	9.624	9.744
12/10/2010	2:47:58	9.675	9.802
12/10/2010	2:48:59	9.549	9.832
12/10/2010	2:49:57	9.573	9.861
12/10/2010	2:50:58	9.605	9.771
Average Unit 1		**9.65**	**9.77**
12/10/2010	2:51:58	9.642	9.907
12/10/2010	2:52:57	9.427	9.851
12/10/2010	2:53:57	9.624	9.769
12/10/2010	2:54:58	9.673	9.801
12/10/2010	2:55:59	9.545	9.855
12/10/2010	2:56:57	9.605	9.747
12/10/2010	2:57:58	9.736	9.714
12/10/2010	2:58:58	9.629	9.773
Pause			
12/10/2010	2:59:57	9.651	9.842

12/10/2010	3:00:57	9.858	9.07
12/10/2010	3:01:58	9.642	10.56
End Pause			
12/10/2010	3:02:59	8.814	10.439
12/10/2010	3:03:57	8.785	10.537
12/10/2010	3:04:58	8.694	10.591
12/10/2010	3:05:58	8.582	10.627
12/10/2010	3:06:57	8.732	10.476
12/10/2010	3:07:57	8.772	10.437
12/10/2010	3:08:58	8.832	10.481
12/10/2010	3:09:59	8.68	10.535
12/10/2010	3:10:57	8.813	10.418
12/10/2010	3:11:58	8.81	10.481
12/10/2010	3:12:58	8.796	10.444
12/10/2010	3:13:57	8.796	10.456
12/10/2010	3:14:58	8.794	10.462
12/10/2010	3:15:58	8.757	10.502
12/10/2010	3:16:59	8.79	10.445
12/10/2010	3:17:57	8.812	10.485
12/10/2010	3:18:58	8.692	10.554
12/10/2010	3:19:58	8.716	10.476
12/10/2010	3:20:57	8.824	10.448
12/10/2010	3:21:58	8.816	10.409
12/10/2010	3:22:58	8.912	10.436
12/10/2010	3:23:59	8.629	10.665
Average Unit 2		**8.77**	**10.49**

Co2 Cal Sheet 1

Client	Hoosier Energy	Test Date	12/7/2010
	Merom	Project #	10-480
Source Identification	1	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: CO2 Span: 18.1	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.00	0.00	0.000	
Low-Range Gas						
Mid-Range Gas		**10.50**	10.60	0.10	0.552	
High-Range Gas		**18.10**	18.01	0.09	0.497	

Run #: 1 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.00	0.03	0.17	0.05	0.28	0.11
Upscale Gas	10.60	10.07	-2.93	10.12	-2.65	0.28

Run #: 2 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.00	0.05	0.28	0.05	0.28	0.00
Upscale Gas	10.60	10.12	-2.65	10.10	-2.76	-0.11

Run #: 3 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.00	0.05	0.28	0.03	0.17	-0.11
Upscale Gas	10.60	10.10	-2.76	10.18	-2.32	0.44

O2 Cal Sheet 1

Client	Hoosier Energy	Test Date	12/7/2010
	Merom	Project #	10-480
Source Identification	1	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: O2 Span: 22.5	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.02	0.02	0.089	
Low-Range Gas						
Mid-Range Gas		**11.00**	11.00	0.00	0.000	
High-Range Gas		**22.50**	22.46	0.04	0.178	

Run #: 1 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.89	3.87	0.70	3.02	-0.84
Upscale Gas	11.00	11.38	1.69	11.11	0.49	-1.20

Run #: 2 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.70	3.02	0.67	2.89	-0.13
Upscale Gas	11.00	11.11	0.49	11.10	0.44	-0.04

Run #: 3 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.67	2.89	0.67	2.89	0.00
Upscale Gas	11.00	11.10	0.44	11.10	0.44	0.00

Co2 Cal Sheet 1

Client	Hoosier Energy	Test Date	12/9/2010
	Merom	Project #	10-480
Source Identification	Unit 1	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: CO2 Span: 18.1	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.02	0.02	0.110	
Low-Range Gas						
Mid-Range Gas		**10.55**	10.61	0.06	0.331	
High-Range Gas		**18.10**	17.91	0.19	1.050	

Run #: 1 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.07	0.28	0.07	0.28	0.00
Upscale Gas	10.61	10.49	-0.66	10.45	-0.88	-0.22

Run #: 2 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.07	0.28	0.07	0.28	0.00
Upscale Gas	10.61	10.45	-0.88	10.45	-0.88	0.00

Run #: 3 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.07	0.28	0.07	0.28	0.00
Upscale Gas	10.61	10.45	-0.88	10.44	-0.94	-0.06

O2 Cal Sheet 1

Client	Hoosier Energy	Test Date	12/9/2010
	Merom	Project #	10-480
Source Identification	Unit 1	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: O2 Span: 22.5	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.03	0.03	0.133	
Low-Range Gas						
Mid-Range Gas		**10.99**	11.12	0.13	0.578	
High-Range Gas		**22.50**	22.52	0.02	0.089	

Run #: 1 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.29	1.16	0.18	0.67	-0.49
Upscale Gas	11.12	11.06	-0.27	10.90	-0.98	-0.71

Run #: 2 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.18	0.67	0.14	0.49	-0.18
Upscale Gas	11.12	10.90	-0.98	10.86	-1.16	-0.18

Run #: 3 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.14	0.49	0.14	0.49	0.00
Upscale Gas	11.12	10.86	-1.16	10.86	-1.16	0.00

Client	Hoosier Energy	Test Date	12/9-10/2010
	Merom	Project #	10-480
Source Identification	Unit 1 Low	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: CO2 Span: 18.1	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.02	0.02	0.110	
Low-Range Gas						
Mid-Range Gas		**10.55**	10.61	0.06	0.331	
High-Range Gas		**18.10**	17.91	0.19	1.050	

Run #: 1 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.07	0.28	0.08	0.33	0.06
Upscale Gas	10.61	10.49	-0.66	10.37	-1.33	-0.66

Run #: 2 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.08	0.33	0.08	0.33	0.00
Upscale Gas	10.61	10.37	-1.33	10.37	-1.33	0.00

Run #: 3 Gas Type: CO2 Span: 18.1	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.02	0.08	0.33	0.08	0.33	0.00
Upscale Gas	10.61	10.37	-1.33	10.38	-1.27	0.06

Client	Hoosier Energy	Test Date	12/9-10/2010
	Merom	Project #	10-480
Source Identification	Unit 1 Low	Operator	stiles

Calibration Data For Sampling Runs: 1- Gas Type: O2 Span: 22.5	Cylinder Number	Cylinder Value % or PPM	Analyzer Response	Absolute Difference % or PPM	Difference % of Span	
Zero Gas		**0.00**	0.03	0.03	0.133	
Low-Range Gas						
Mid-Range Gas		**10.99**	11.12	0.13	0.578	
High-Range Gas		**22.50**	22.52	0.02	0.089	

Run #: 1 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.14	0.49	0.09	0.27	-0.22
Upscale Gas	11.12	10.86	-1.16	10.82	-1.33	-0.18

Run #: 2 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.09	0.27	0.09	0.27	0.00
Upscale Gas	11.12	10.82	-1.33	10.82	-1.33	0.00

Run #: 3 Gas Type: O2 Span: 22.5	Analyzer Response	Initial Values		Final Values		Drift % of Span
		System Response	System Cal. Bias % of Span	System Response	System Cal. Bias % of Span	
Zero Gas	0.03	0.09	0.27	0.10	0.31	0.04
Upscale Gas	11.12	10.82	-1.33	10.79	-1.47	-0.13

Grace Consulting, Inc.
EPA Method 5
522 Series Meter Box Calibration
Calibration Orifice Method
English Meter Box Units, English K' Factor

D	11/30/2010
Model:	APEX
Serial:	13A

Barometric Pressure:	29.00	(in Hg)
Theoretical Critical Vacuum:	13.68	(in Hg)

IMPORTANT For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
IMPORTANT The Critical Orifice Coefficient, K', must be entered in English units, (ft)^3*(deg R)^0.5/((in.Hg)*(min)).

DRY GAS METER READINGS							Critical Orifice Readings					
dH (in H2O)	Time (min)	Volume Initial (cu ft)	Volume Final (cu ft)	Volume Total (cu ft)	Temp Initial (deg F)	Temp Final (deg F)	Orifice Serial #	K' Orifice Coefficient (see above)	Actual Vacuum (in Hg)	AMBIENT TEMPERATURE Initial (deg F)	Final (deg F)	Average (deg F)
0.59	21.6	489.300	499.337	10.037	68	70	48	0.3449	20	68	67	67.5
1.10	16.5	499.400	509.478	10.078	70	71	55	0.4595	18	67	66	66.5
1.80	12.8	509.500	519.560	10.060	71	72	63	0.5958	17	66	66	66.0
3.30	9	519.600	529.650	10.050	72	73	73	0.8215	13	66	66	66.0

CORRECTED VOLUME	
DRY GAS METER Vm(std) (cu ft)	ORIFICE Vcr(std) (cu ft)
9.721	9.407
9.745	9.582
9.727	9.643
9.736	9.349

DRY GAS METER CALIBRATION FACTOR Y	
Value	Variation
0.968	-0.008
0.983	0.0076
0.991	0.0157
0.960	-0.0154

Average 0.976

ORIFICE CALIBRATION FACTOR dH@	
Value (in H20)	Variation (in H20)
1.750	-0.022
1.835	0.062
1.784	0.012
1.720	-0.052

Average 1.772

Orifice for Calc.
2.8007

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

For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H20 that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +-0.2.

SIGNED: _____ Date: 11-30-10

$$V_{m(std)} = 17.64\,(V_m)\frac{P_b + \frac{\Delta H}{13.6}}{t_m + 460}$$

$$V_{cr(std)} = K'\frac{P_b\theta}{\sqrt{t_{amb} + 460}}$$

$$Y = \frac{V_{cr(std)}}{V_{m(std)}}$$

$$\Delta H_@ = \Delta H\left(\frac{.75\theta}{V_{cr(std)}}\right)^2$$

Grace Consulting, Inc.
EPA Method 5
522 Series Meter Box Calibration
Calibration Orifice Method
English Meter Box Units, English K' Factor

Date:	10/5/2010
Model:	Apex
Serial:	19AO

Barometric Pressure:	29.35	(in Hg)
Theoretical Critical Vacuum:	13.84	(in Hg)

IMPORTAI For valid test results, the Actual Vacuum should be 1 to 2 in. Hg greater than the Theoretical Critical Vacuum shown above.
IMPORTAI The Critical Orifice Coefficient, K', must be entered in English units, (ft)^3*(deg R)^0.5/((in.Hg)*(min)).

DRY GAS METER READINGS							Critical Orifice Readings			AMBIENT TEMPERATURE		
dH (in H2O)	Time (min)	Volume Initial (cu ft)	Volume Final (cu ft)	Volume Total (cu ft)	Temp Initial (deg F)	Temp Final (deg F)	Orifice Serial #	K' Orifice Coefficient (see above	Actual Vacuum (in Hg)	Initial (deg F)	Final (deg F)	Average (deg F)
0.71	22	853.000	863.043	10.043	58	59	48	0.3449	20	60	60	60
1.20	16.7	863.100	873.140	10.040	59	60	55	0.4595	19	60	61	60.5
1.90	13.1	873.200	883.245	10.045	60	61	63	0.5958	17	61	61	61
3.5	9.6	883.300	893.39	10.090	61	62	73	0.8215	14	61	61	61

CORRECTED VOLUME	
DRY GAS METER Vm(std) (cu ft)	ORIFICE Vcr(std) (cu ft)
10.046	9.766
10.036	9.872
10.039	10.036
10.105	10.141

DRY GAS METER CALIBRATION FACTOR Y	
Value	Variation
0.972	-0.018
0.984	-0.0061
1.000	0.009931
1.004	0.013783

ORIFICE CALIBRATION FACTOR dH@	
Value (in H20)	Variation (in H20)
2.027	0.141
1.932	0.046
1.821	-0.065
1.764	-0.122

Orifice for Calc.
3.10189

Average	0.990

Average	1.886

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

For Orifice Calibration Factor dH@, the orifice differential pressure in inches of H20 that equates to 0.75 cfm of air at 68 F and 29.92 inches of Hg, acceptable tolerance of individual values from the average is +-0.2.

SIGNED: _____ Date: 10-5-10

$$V_{m(std)} = 17.64\,(V_m)\frac{P_b + \frac{\Delta H}{13.6}}{t_m + 460}$$

$$V_{cr(std)} = K'\frac{P_b\theta}{\sqrt{t_{amb} + 460}}$$

$$Y = \frac{V_{cr(std)}}{V_{m(std)}}$$

$$\Delta H_{@} = \Delta H\left(\frac{.75\theta}{V_{cr(std)}}\right)^2$$

Airgas

Airgas Great Lakes, Inc.
2009 Bellaire Ave.
Royal Oak, MI 48067
Ph: (248) 399-9150
Fax: (248) 584-2540
http://www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Customer:	OAKWOOD		
Part Number:	E03NI78E15A42E4	Reference Number:	32-112155714-1
Cylinder Number:	SG9151360BAL	Cylinder Volume:	151 Cu.Ft.
Laboratory:	MIC - Royal Oak-32 - MI	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 12, 2010	Valve Outlet:	590

Expiration Date: Oct 12, 2013

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
CARBON DIOXIDE	10.50 %	10.55 %	G1	+/- 1% NIST Traceable
OXYGEN	11.00 %	10.99 %	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	09060608	CC262099	9.921% CARBON DIOXIDE/NITROGEN	Apr 10, 2013
NTRM	980509	SG9168307BAL	16.04% OXYGEN/NITROGEN	Dec 01, 2015

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
E/N 54, 16% CO2, Nicolet 6700	Fourier Transform Infrared (FTIR)	Oct 01, 2010
E/N 51, 25%FS O2, Rosemont 755R	Paramagnetic (Para)	Oct 05, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

2327

SPECIALTY GASES OF AMERICA, INC.
AMERICAN INDUSTRIAL GASES, INC.
AMERICAN RARE GASES, INC.

6055 BRENT DR. TOLEDO, OH 43611
419-729-7732 FAX 419-729-2411

THE AMERICAN GAS GROUP

www.americangasgroup.com

ANALYTICAL REPORT

Certificate ID: 052710028 **Date:** 5/27/2010

Customer Name: Grace Consulting, Wellington

Customer Address: 510 Dickson St.

Wellington OH 44090

Purchase Order: 05231001` **Work Order:** 104304-00

Lot Number: 0521UC10 **Product Name:** 3-Component Mixture, EPA Protocol

Size: 31A **Pressure:** 2175 psig @ 80 Deg F

Content: N/A

Serial #: EB0019410

Analysis Date: 5/26/2010

Shelf Life: 36 months **Expiration Date:** 5/26/2013

Component	Nominal	Actual	Accuracy	Method
Oxygen	11.0%	11.0%	+/- 1% rel	Paramagnetic
Carbon Dioxide	10-10.5%	10.5%	+/- 1% rel	GC-TCD
Nitrogen	Balance	Balance		

REFERENCE STANDARD

Std Type	Std #	Cyl #	Concentration	Exp Date
GMIS	0604JI09	CC275865	21.0500	6/3/2011
GMIS	0308JJ10	EB0009831	16.05%	3/4/2012

INSTRUMENTATION

Instrument / ID	Component
Rosemount 755R	O2
GOWMAC-580 TCD	CO2

Note: * ANALYZED ACCORDING TO EPA TRACEABILITY PROTOCOL FOR ASSAY AND CERTIFICATION OF GASEOUS CALIBRATION STANDARDS - SEPTEMBER 1997:G1
* DO NOT USE STANDARD WHEN PRESSURE IS BELOW 150 PSIG

Protocal
Specialty Gases of America, Inc

Issued by: Josh Jones

2255

SPECIALTY GASES OF AMERICA, INC.
AMERICAN INDUSTRIAL GASES, INC.
AMERICAN RARE GASES, INC.

6055 BRENT DR. TOLEDO, OH 43611
419-729-7732 FAX 419-729-2411

THE AMERICAN GAS GROUP

www.americangasgroup.com

ANALYTICAL REPORT

Certificate ID: 111009002 **Date:** 11/10/2009

Customer Name: Operadora San Felipe Republica Dominicana

Customer Address: Camino A Magoliolo N 27, Costambar

Puerto Plata R.D. RNC 101892633
440-647-6672

Purchase Order: 11030900 **Work Order:** 095850-04

Lot Number: 1105HA09 **Product Name:** 3-Component Mixture, EPA Protocol

Size: 31A **Pressure:** 2015 psig @ 70 Deg F

Content: N/A

Serial #: EB0005676

Analysis Date: 11/9/2009

Shelf Life: 36 months **Expiration Date:** 11/9/2012

Component	Nominal	Actual	Accuracy	Method
Carbon Dioxide	18.0%	18.1%	+/- 1% rel	GC-TCD
Oxygen	22.5%	22.5%	+/- 1% rel	Paramagnetic
Nitrogen	Balance	Balance		

REFERENCE STANDARD

Std Type	Std #	Cyl #	Concentration	Exp Date
GMIS	0828HC08	EB0009831	16.0300	1/2/2011
GMIS	0604JL09	EB0001025	25.1500	6/3/2011

INSTRUMENTATION

Instrument / ID	Component
Horiba VA-3000	CO2
Rosemount 755R	O2

Note: * ANALYZED ACCORDING TO EPA TRACEABILITY PROTOCOL FOR ASSAY AND CERTIFICATION OF GASEOUS CALIBRATION STANDARDS - SEPTEMBER 1997:G1
* DO NOT USE STANDARD WHEN PRESSURE IS BELOW 150 PSIG

Protocal
Specialty Gases of America, Inc

Issued by: Josh Jones

G.C.I. Laboratory Analysis

Client:	Hoosier Energy	**Date:**	12/7/2010
Plant Site:	Merom	**Project Number:**	10-480
Test Location:	Unit 1 Stack	**Analyst:**	H. Stiles
		Barium Normality:	0.0091

H2SO4 Lab

Run Number	Sample Number	Volume of Solution	Volume of Aliquot	Mls to Titrate			
Unit 1 Stack	**1**	**100.5**	**10**	8.400		8.400	8.400
Unit 1 Stack	**2**	**102.5**	**10**	8.8		8.9	8.850
Unit 1 Stack	**3**	**93.5**	**10**	8.7		8.5	8.600
Blank		**100**	**10**	0.000		0.000	0.000

G.C.I. Laboratory Analysis

Client:	Hoosier Energy	**Date:**	12/9/2010
Plant Site:	Merom	**Project Number:**	10-480
Test Location:	Unit 1 Stack	**Analyst:**	H. Stiles
		Barium Normality:	0.0091

H2SO4 Lab

Run Number	Sample Number	Volume of Solution	Volume of Aliquot	Mls to Titrate			
Unit 1 Stack	**1**	**69.5**	**10**	13.000		12.800	12.900
Unit 1 Stack	**2**	**89.5**	**10**	11.3		11.1	11.200
Unit 1 Stack	**3**	**96**	**10**	10.4		10.6	10.500
Blank		**100**	**10**	0.000		0.000	0.000

G.C.I. Laboratory Analysis

Client:	Hoosier Energy	**Date:**	12/10/2010
Plant Site:	Merom	**Project Number:**	10-480
Test Location:	Unit 1 Stack	**Analyst:**	H. Stiles
		Barium Normality:	0.0091

H2SO4 Lab

Run Number	Sample Number	Volume of Solution	Volume of Aliquot	Mls to Titrate			
Unit 1 Stack	**1**	**81.5**	**10**	8.200		8.100	8.150
Unit 1 Stack	**2**	**97.5**	**10**	8.7		8.6	8.650
Unit 1 Stack	**3**	**91.5**	**10**	9.7		9.9	9.800
Blank		**100**	**10**	0.000		0.000	0.000

UNIT #1
High - PM, H_2SO_4

Average Data

Plant: MEROM
Interval: 15 Minute
Type: Roll
Report Period: 12/07/2010 19:00 Through 12/08/2010 04:00
Time Online Criteria: 1 minute(s)

Source		UNIT#1
Parameter (Unit)		LOADMW (MW)
12/07/10	19:00	525.5
12/07/10	19:15	526.8
12/07/10	19:30	527.5
12/07/10	19:45	524.3
12/07/10	20:00	525.3
12/07/10	20:15	527.9
12/07/10	20:30	527.3
12/07/10	20:45	525.9
12/07/10	21:00	526.7
12/07/10	21:15	525.7
12/07/10	21:30	527.3
12/07/10	21:45	525.1
12/07/10	22:00	527.0
12/07/10	22:15	527.4
12/07/10	22:30	526.4
12/07/10	22:45	526.1
12/07/10	23:00	526.5
12/07/10	23:15	526.1
12/07/10	23:30	526.3
12/07/10	23:45	526.5
12/08/10	00:00	526.4
12/08/10	00:15	526.1
12/08/10	00:30	526.9
12/08/10	00:45	526.4
12/08/10	01:00	525.9
12/08/10	01:15	525.5
12/08/10	01:30	525.8
12/08/10	01:45	526.0
12/08/10	02:00	526.7
12/08/10	02:15	525.8
12/08/10	02:30	526.8
12/08/10	02:45	525.4
12/08/10	03:00	525.3
12/08/10	03:15	526.3
12/08/10	03:30	525.8
12/08/10	03:45	526.6
12/08/10	04:00	525.2

Average	526.2
Minimum	524.3
Maximum	527.9
Summation	19,470.5
Included Data Points	37
Total number of Data Points	37

F = Unit Offline E = Exceedance C = Calibration S = Substituted
I = Invalid M = Maintenance T = Out Of Control * = Suspect

Unit #1 & #2
Mid - H_2SO_4

Average Data

Plant: MEROM
Interval: 15 Minute
Type: Roll
Report Period: 12/09/2010 16:00 Through 12/09/2010 20:00
Time Online Criteria: 1 minute(s)

Source		UNIT#1	UNIT#2
Parameter (Unit)		LOADMW (MW)	LOADMW (MW)
12/09/10	16:00	410.2	408.8
12/09/10	16:15	410.5	409.2
12/09/10	16:30	409.9	409.5
12/09/10	16:45	410.3	408.7
12/09/10	17:00	409.9	409.0
12/09/10	17:15	410.2	408.3
12/09/10	17:30	409.6	409.0
12/09/10	17:45	409.6	408.3
12/09/10	18:00	411.7	408.9
12/09/10	18:15	411.7	407.5
12/09/10	18:30	409.8	408.7
12/09/10	18:45	410.1	407.9
12/09/10	19:00	409.7	409.0
12/09/10	19:15	409.6	409.0
12/09/10	19:30	410.1	408.5
12/09/10	19:45	411.9	403.8
12/09/10	20:00	409.2	378.6
Average		410.2	406.6
Minimum		409.2	378.6
Maximum		411.9	409.5
Summation		6,974.0	6,912.4
Included Data Points		17	17
Total number of Data Points		17	17

F = Unit Offline E = Exceedance C = Calibration S = Substituted
I = Invalid M = Maintenance T = Out Of Control * = Suspect

Average Data

Unit #1 & 2

LOW - H_2SO_4

Plant: MEROM
Interval: 15 Minute
Type: Roll
Report Period: 12/10/2010 00:00 Through 12/10/2010 03:30
Time Online Criteria: 1 minute(s)

Source	UNIT#1	UNIT#2
Parameter (Unit)	LOADMW (MW)	LOADMW (MW)
12/10/10 00:00	309.9	305.8
12/10/10 00:15	310.5	304.4
12/10/10 00:30	310.3	303.9
12/10/10 00:45	310.2	305.2
12/10/10 01:00	310.9	304.7
12/10/10 01:15	310.7	304.4
12/10/10 01:30	310.4	304.2
12/10/10 01:45	309.1	305.5
12/10/10 02:00	309.1	305.0
12/10/10 02:15	308.8	304.5
12/10/10 02:30	309.2	304.1
12/10/10 02:45	309.0	304.6
12/10/10 03:00	309.2	304.8
12/10/10 03:15	309.5	304.8
12/10/10 03:30	309.7	307.4
Average	309.8	304.9
Minimum	308.8	303.9
Maximum	310.9	307.4
Summation	4,646.4	4,573.1
Included Data Points	15	15
Total number of Data Points	15	15

F = Unit Offline E = Exceedance C = Calibration S = Substituted
I = Invalid M = Maintenance T = Out Of Control * = Suspect