

Monthly Site Report for Clarkson

Report Date 1/2012

(First day:1/1/2012, Last day: 1/31/2012)

Commissioned Date 12/11/2008

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	100.00%
Microturbine Run Time Availability	94.40%
Total KWHRs	135,999.4 kWh

MTBFO

System	0.0 hours
MicroTurbine	234.2 hours
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	9.3 MMBTU
Total Heating BTU's	185.8 MMBTU
Total Fuel Consumed	1,669.2 MMBTU
Electrical Efficiency	27.90%
Thermal Efficiency	11.70%
Total System Efficiency	39.50%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRs
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	743.8	5,481.60			
MicroTurbine 1	742	26,630.00	2	109	47,920.60
MicroTurbine 2	628	27,246.00	19	92	40,474.30
MicroTurbine 3	738	26,544.00	6	116	47,604.60

Comments:

NC* = Not Calculable

NA** = Not Applicable

ND*** = No Data

Monthly Site Report for Clarkson

Report Date **2/2012**

(First day: 2/1/2012, Last day: 2/29/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	100.00%
Microturbine Run Time Availability	100.00%
Total KWHRS	134,875.7 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	5.3 MMBTU
Total Heating BTU's	166.7 MMBTU
Total Fuel Consumed	1,685.7 MMBTU
Electrical Efficiency	27.30%
Thermal Efficiency	10.20%
Total System Efficiency	37.50%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	685.9	5,481.60			
MicroTurbine 1	696	27,327.00	NA**	109	44,904.50
MicroTurbine 2	696	27,942.00	NA**	92	45,100.20
MicroTurbine 3	696	27,240.00	NA**	116	44,871.00

Comments:

* MT Hours exceed max hours for selected date range, this is normally because of a past value being used at the beginning of the month

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NA** = Not Applicable

ND*** = No Data

Monthly Site Report for Clarkson

Report Date **3/2012**

(First day:3/1/2012, Last day: 3/31/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	100.00%
Microturbine Run Time Availability	100.00%
Total KWHRS	136,641.5 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	5.6 MMBTU
Total Heating BTU's	110.6 MMBTU
Total Fuel Consumed	1,840.3 MMBTU
Electrical Efficiency	25.40%
Thermal Efficiency	6.30%
Total System Efficiency	31.70%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	742.6	5,481.60			
MicroTurbine 1	742	28,069.00	1	110	45,197.10
MicroTurbine 2	743	28,685.00	NA**	92	46,564.20
MicroTurbine 3	743	27,983.00	NA**	116	44,880.20

Comments:

NC* = Not Calculable

NA** = Not Applicable

ND*** = No Data

Monthly Site Report for Clarkson

Report Date **4/2012**

(First day:4/1/2012, Last day: 4/30/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	99.70%
Microturbine Run Time Availability	100.00%
Total KWHRS	132,392.2 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	21.4 MMBTU
Total Heating BTU's	100.4 MMBTU
Total Fuel Consumed	1,826.8 MMBTU
Electrical Efficiency	24.80%
Thermal Efficiency	6.70%
Total System Efficiency	31.40%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	717.1	5,917.00			
MicroTurbine 1	720	28,789.00	NA**	110	43,252.10
MicroTurbine 2	720	29,405.00	NA**	92	45,601.50
MicroTurbine 3	720	28,703.00	NA**	116	43,538.60

Comments:

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ND*** = No Data

Monthly Site Report for Clarkson

Report Date **5/2012**

(First day:5/1/2012, Last day: 5/31/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	99.30%
Microturbine Run Time Availability	95.80%
Total KWHRS	116,419.9 kWh

MTBFO

System	0.0 hours
MicroTurbine	1,069.5 hours
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	86.1 MMBTU
Total Heating BTU's	38.7 MMBTU
Total Fuel Consumed	1,752.9 MMBTU
Electrical Efficiency	22.60%
Thermal Efficiency	7.10%
Total System Efficiency	29.80%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	738.1	6,640.10			
MicroTurbine 1	697	29,486.00	4	114	36,786.20
MicroTurbine 2	744	30,149.00	1	93	42,486.90
MicroTurbine 3	698	29,401.00	5	121	37,146.80

Comments:

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ND*** = No Data

Monthly Site Report for Clarkson

Report Date **6/2012**

(First day:6/1/2012, Last day: 6/30/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	89.10%
Microturbine Run Time Availability	99.30%
Total KWHRS	111,650.6 kWh

MTBFO

System	0.0 hours
MicroTurbine	2,144.0 hours
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	108.7 MMBTU
Total Heating BTU's	33.2 MMBTU
Total Fuel Consumed	1,772.5 MMBTU
Electrical Efficiency	21.50%
Thermal Efficiency	8.00%
Total System Efficiency	29.50%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	642.4	7,282.60			
MicroTurbine 1	708	30,194.00	4	118	35,834.80
MicroTurbine 2	718	30,867.00	5	98	39,233.30
MicroTurbine 3	718	30,119.00	4	125	36,582.40

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Monthly Site Report for Clarkson

Report Date **7/2012**

(First day: 7/1/2012, Last day: 7/31/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	85.30%
Microturbine Run Time Availability	83.20%
Total KWHRS	92,965.6 kWh

MTBFO

System	0.0 hours
MicroTurbine	154.8 hours
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	150.8 MMBTU
Total Heating BTU's	24.4 MMBTU
Total Fuel Consumed	1,478.5 MMBTU
Electrical Efficiency	21.50%
Thermal Efficiency	11.90%
Total System Efficiency	33.30%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	634.1	7,899.90			
MicroTurbine 1	401	30,595.00	3	121	19,073.80
MicroTurbine 2	742	31,609.00	2	100	39,870.70
MicroTurbine 3	715	30,834.00	2	127	34,021.10

Comments:

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Monthly Site Report for Clarkson

Report Date **8/2012**

(First day:8/1/2012, Last day: 8/31/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	94.30%
Microturbine Run Time Availability	90.80%
Total KWHRS	105,329.3 kWh

MTBFO

System	0.0 hours
MicroTurbine	2,026.0 hours
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	137.9 MMBTU
Total Heating BTU's	52.8 MMBTU
Total Fuel Consumed	1,703.5 MMBTU
Electrical Efficiency	21.10%
Thermal Efficiency	11.20%
Total System Efficiency	32.30%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRs
	MONTHLY Y	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	701.3	8,547.60			
MicroTurbine 1	582	31,177.00	8	129	30,647.60
MicroTurbine 2	742	32,351.00	4	104	39,866.00
MicroTurbine 3	702	31,536.00	5	132	34,815.70

Comments:

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Monthly Site Report for Clarkson

Report Date **9/2012**

(First day:9/1/2012, Last day: 9/30/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	93.60%
Microturbine Run Time Availability	100.00%
Total KWHRs	112,994.6 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	118.8 MMBTU
Total Heating BTU's	62.6 MMBTU
Total Fuel Consumed	1,769.5 MMBTU
Electrical Efficiency	21.90%
Thermal Efficiency	10.20%
Total System Efficiency	32.10%

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRs
	MONTHL Y	TOTAL	MONTHL Y	TOTAL	MONTHL Y
	Chiller	503.4	313.7		
MicroTurbine 1	720	31,897.00	NA**	129	39,558.60
MicroTurbine 2	720	33,071.00	1	105	40,975.40
MicroTurbine 3	720	32,256.00	NA**	132	32,460.60

Comments:

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 ND*** = No Data

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Monthly Site Report for ClarksonReport Date **12/2012**

(First day:12/1/2012, Last day: 12/31/2012)

Commissioned Date **12/11/2008****Site Configuration** PureComfort® 180**PURECOMFORT® Systems 180 System #1****Summary System Data**

Chiller Run Time Availability	95.5 %
Microturbine Run Time Availability	100.0 %
Total KWHS	142,535.9 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	3.3 MMBTU
Total Heating BTU's	178.0 MMBTU
Total Fuel Consumed	1,825.5 MMBTU
Electrical Efficiency	26.6 %
Thermal Efficiency	9.9 %
Total System Efficiency	36.6 %

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHS
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	1,775.6	987.3			
MicroTurbine 1	744.0	34,089.0	1	137	47,788.6
MicroTurbine 2	744.0	35,262.0	1	113	47,957.7
MicroTurbine 3	744.0	34,448.0	1	136	46,789.7

Comments:

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Monthly Site Report for Clarkson

Report Date **11/2012**

(First day:10/28/2012, Last day: 11/30/2012)

Commissioned Date **12/11/2008**

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1

Summary System Data

Chiller Run Time Availability	97.1 %
Microturbine Run Time Availability	100.0 %
Total KWHRs	152,386.9 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	31.3 MMBTU
Total Heating BTU's	101.9 MMBTU
Total Fuel Consumed	1,494.0 MMBTU
Electrical Efficiency	26.0 %
Thermal Efficiency	8.9 %
Total System Efficiency	34.9 %

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRs
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	1,449.8	939.1			
MicroTurbine 1	800.0	33,345.0	7	136	51,183.1
MicroTurbine 2	799.0	34,518.0	7	112	51,040.7
MicroTurbine 3	800.0	33,704.0	3	135	50,163.1

Comments:

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Monthly Site Report for Clarkson

Report Date 10/2012

(First day: 10/1/2012, Last day: 10/28/2012)

Commissioned Date 12/11/2008

Site Configuration PureComfort® 180

PURECOMFORT® Systems 180 System #1**Summary System Data**

Chiller Run Time Availability	87.9 %
Microturbine Run Time Availability	100.0 %
Total KWHRs	109,187.0 kWh

MTBFO

System	NC*
MicroTurbine	NC*
Chiller/Heater	

Efficiency Monitoring System

Total Cooling BTU's	77.3 MMBTU
Total Heating BTU's	68.6 MMBTU
Total Fuel Consumed	1,578.3 MMBTU
Electrical Efficiency	23.6 %
Thermal Efficiency	9.2 %
Total System Efficiency	32.9 %

PureComfort® System Units	HOURS		ATTEMPTED STARTS		KWHRs
	MONTHLY	TOTAL	MONTHLY	TOTAL	MONTHLY
Chiller	1,391.4	193.2			
MicroTurbine 1	650.0	32,547.0	NA**	129	38,070.0
MicroTurbine 2	650.0	33,721.0	NA**	105	39,071.0
MicroTurbine 3	650.0	32,906.0	NA**	132	32,046.0

Comments:

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