

Header Information			
Manufacturer:	General Electric	Date Tested:	07-10-2020
Model Number:	40T-12BXR01	Date Sample Rec.:	06-17-2020
Serial Number:	PROTO	Test Station #:	Cleveland - 3
Test Procedure:	DOE UEF 1st Hour (Storage)	Heating Medium:	Natural Gas
Software Version	2.15.1031.19	Operator:	Ashley Cocita
Data File Name:	UEFFHRgasST-3-GE3-1102_Report.csv		
Report File Name:	UEFFHRgasST-3-GE3-1102_Report.xlsx		

First Hour Test Data Inputs

How many pre-draws were conducted

Was the final draw already initiated at 1hr?

0
No

Draw (include all draws)	1	2	3	4	5	6
Draw duration [mm:ss]	0:10:26	0:11:26	0:03:02			
Volume Drawn (gal.):	31.8	34.6	9.2			
Min Flow Rate [GPM]	3.0	3.0	3.0			
Max Flow Rate [GPM]	3.1	3.0	3.0			
Inlet water temperature min. (°F):	57.7	57.7	57.7			
Inlet water temperature max. (°F):	57.8	57.8	57.8			
Inlet water temperature avg (°F)	57.7	57.7	57.7			
Cut Off Temperature [°F]	121.47	110.99	110.99			
T* _{max} outlet [°F]	136.49	126.02	115.86			
Temperature drop in outlet [°F]	15.01	15.03	4.88			
Average T* _{del} [°F]	131.05	120.40	112.50			
Density, ρ [lbs/gallon]	8.23	8.25	8.26			
Mass of the water removed [lbs]	261.44	285.34	76.37			

Draws completed, n	3	include last draw	
Partial Credit Given	Yes	Percent water withdrawn[%]	34.1
Min Ambient Temp [°F]	66.6	Minimum R.H. [%]	0.0
Max Ambient Temp [°F]	66.8	Maximum R.H. [%]	0.0
Avg Ambient Temp [°F]	66.7	Average R.H. [%]	0.0

$$F_{hr} = \sum_{i=1}^{n-1} V_i + \frac{V_n (T_{del, n} - T_{min, n-1})}{(T_{del, n-1} - T_{min, n-1})}$$

1st-Hr Rating, F_{hr} 67.85 gallons

Draw Pattern: Med-usage

First Hour Rating Test Conditions

	Measurement		Minimum	Maximum	Check	Unit
	Min	Max				
Inlet temperature	57.69	57.78	56.00	60.00	TRUE	° F
Flow rate	2.99	3.05	2.75	3.25	TRUE	GPM
Ambient Room	66.56	66.81	65.00	70.00	TRUE	° F

Setup (This table should include instrumentation, sensors, and all equipment used during testing)					
Instrument Type	Brand	Model #	Accuracy	Date of Last	Deadline for Next
Thermocouple 1	Z00007616	TJ180-CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
Thermocouple 2	Z00005566	TJ180-CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
Thermocouple 3	Z00007590	TJ180-CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
Thermocouple 4	Z00005567	TJ180-CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
Thermocouple 5	Z00005563	TJ-180CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
Thermocouple 6	Z00004877	TJ180-CPSS-18U-	+/-0.5°F	7/8/2020	1/8/2021
RTD Inlet	Z00009715	3SSDXK6BZZZZ	+/-0.2°F	4/17/2020	7/17/2020
RTD Outlet	Z00007877	3SSDXK6BZZZZ	+/-0.2°F	4/17/2020	7/17/2020
Ambient RTD	Z00017274	3SSBRK6BZZZZ	+/-0.2°F	4/27/2020	7/27/2020
Power Meter	Z00001528	WT310HC	+/- 0.1% of reading	5/6/2020	5/6/2021
Water Flow	9389	ACM-3000	+/- 0.5% of reading	5/8/2020	8/8/2020
Water Pressure	Z00009189	ZM1500-DI0300	±0.125%FS	5/6/2020	5/6/2021
Gas Meter Pressure	Z00005027	ZM1500-DN0028	±0.125%FS	5/6/2020	5/6/2021
Gas Meter	Z00001497	AC-250	+/-1% of reading	5/6/2020	5/6/2021
Gas Meter Temperature	Z00015424	3SSBRK6BZZZZ	+/-0.2°F	5/6/2020	5/6/2021
Manifold Pressure	Z00013657	ZM1500-DM0028	±0.125%FS	5/6/2020	5/6/2021
Notes/Comments (Please clarify any pertinent details, unusual events, etc.)					
40136 BTU/15 min					
Test Report Sign-Off Block					
By signing in the space below, we certify that the information and data in this report: (1) were obtained from the specific test unit under test; (2) were obtained during the specific test being reported; (3) were not copied from any other source, except where instructed to do					
Role	Date	Entity			
Test Completion	07-10-2020	Ashley Cocita			
Template Completion	07-13-2020	Ashley Cocita			
Report Review by Test Lab	07-13-2020	Mark Whiteman			