



# FUEL USE SAVINGS REPORT

for

## FOOD STORAGE WAREHOUSE FACILITY

### PROJECT HISTORY

Based on previous successful installations of Thermo-Cycler® equipment, the building owner and local Thermo-Cycler Dealer chose to use two (2) THERMO-CYCLER® GTC480M gas fired heating units as heating system in the 50,000 sq. ft. dry food storage area. Two 48" transfer fans between the heated dry storage area and refrigerated area are used to maintain refrigerated area above 35° F.

### BUILDING DATA

TOTAL AREA: 100,000 SQ. FT. - 500' X 250' OVERALL

AVERAGE HEIGHT: 28.3 FT. (27 FT. EAVE, 1/4:12 PITCH)

OVERHEAD DOORS: 6 - 9' X 9', 2 - 12' X 12', 1 - 12' X 14'

WALL CONSTRUCTION: PRE-ENGINEERED METAL WITH R-30 INSULATION

ROOF CONSTRUCTION: PRE-ENGINEERED METAL WITH R-30 INSULATION

BUILDING USAGE: WAREHOUSE: 50,000 SF DRY FOOD PRODUCT STORAGE / 50,000 SF REFRIGERATED

DESIGN CONDITIONS: DRY STORAGE MAINTAINED AT APPRX. 50°F, REFRIGERATED MAINTAINED AT APPRX 40°F

**1 ¢  
per  
sq. ft.**

### Seasonal Gas Usage & Cost

Month	Mcf Used	Cost
August	0.0	\$18.20
September	0.0	\$18.20
October	0.0	\$18.20
November	0.1	\$20.16
December	0.2	\$21.03
January	2.6	\$41.91
February	4.4	\$57.99
March	3.9	\$53.10
April	2.2	\$36.52
May	0.6	\$24.12
June	0.7	\$24.73
July	0.0	\$18.94
<b>Annual Total</b>	<b>14.7 Mcf</b>	<b>\$353.10 (@ \$9.04 per Mcf)</b>

### BOTTOM LINE

Energy efficient recovery of all internal sources of heat gain by the THERMO-CYCLER System resulted in a seasonal heating cost of less than one cent (\$0.01) per square foot for this Central Michigan Food Storage Warehouse

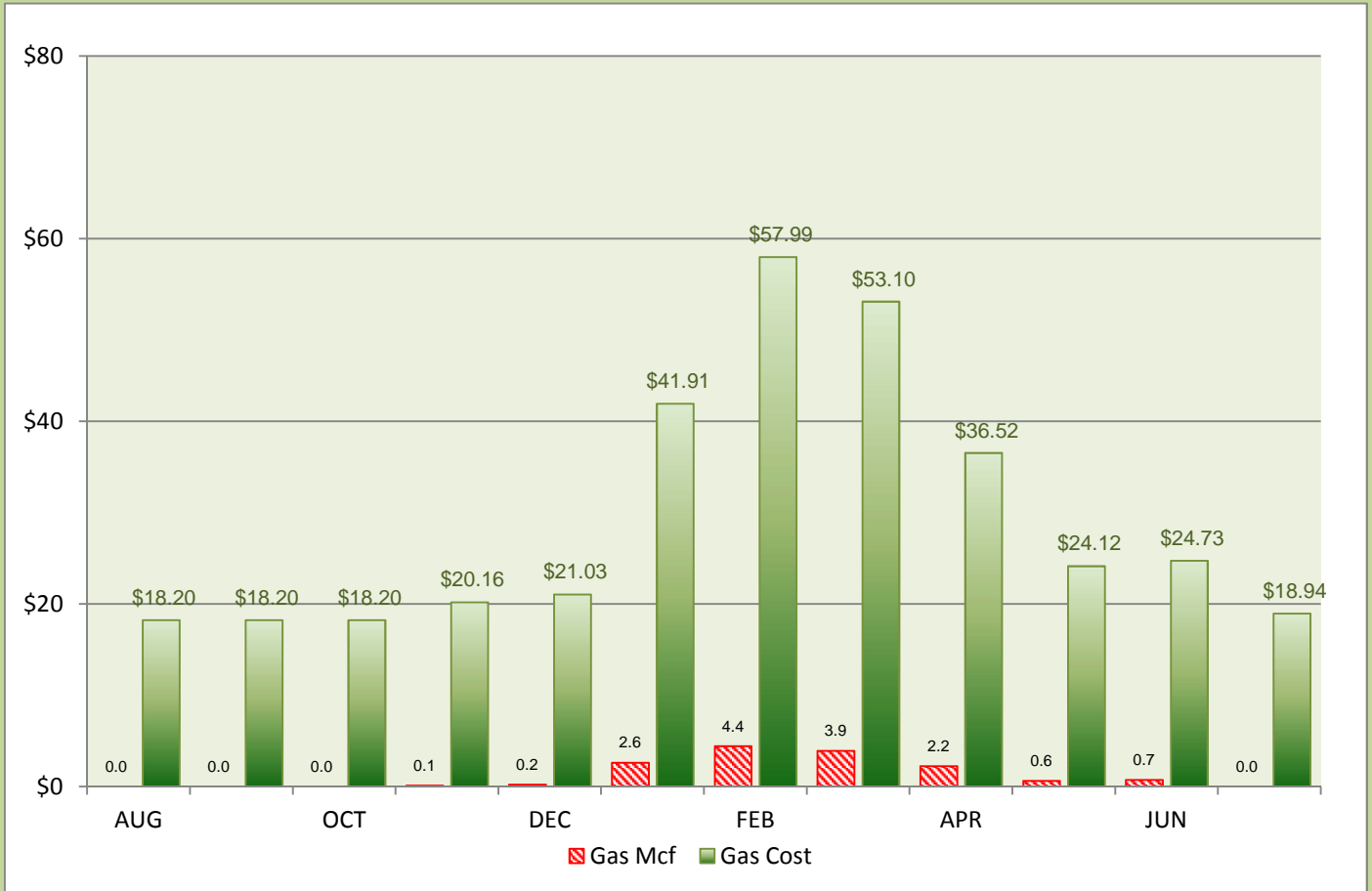


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# 100,000 sq. ft . Central MI Warehouse

## 2011-2012 Gas Consumption & Cost



**Total Gas  
Cost  
\$353**

Month	Yr	Gas Mcf	Gas Cost	HDD-65	HDD-50
AUG	2011	0.0	\$ 18.20	3	0
SEP	2011	0.0	\$ 18.20	174	4
OCT	2011	0.0	\$ 18.20	425	79
NOV	2011	0.1	\$ 20.16	653	224
DEC	2011	0.2	\$ 21.03	970	505
JAN	2012	2.6	\$ 41.91	1105	640
FEB	2012	4.4	\$ 57.99	980	545
MAR	2012	3.9	\$ 53.10	512	203
APR	2012	2.2	\$ 36.52	536	125
MAY	2012	0.6	\$ 24.12	140	0
JUN	2012	0.7	\$ 24.73	45	0
JUL	2012	0.0	\$ 18.94	0	0
TOTAL		14.7	\$ 353.10	5543	2325

