

Dear GMX,

Here is a short summary of our gas use with GMX Magnetic Fluid Conditioners on some of our natural gas flex lines.

In Oct 08 I put one GMX 800 on the dryer gas line (probably needs two) and in Nov 08, I put two GMX 800s on the gas line to our gas furnace. I have not put any GMX units on the gas line to water heater yet, but might in the future. We cannot put GMX on the line coming into the house unless we modify the pipe so I used the flexible lines that do not contain iron. Magnets stick to the rest of the pipe.

In Dec 07 we used 98 therms . In Dec 08 we used 70 therms . The average Dec 07 temperature was 36.5 degrees. The average Dec 08 temperature was 38.8 degrees, about six percent higher. The temperatures are from the national weather bureau. I emailed PNM (our gas provider) with that information and asked how much my gas savings would be based on the difference in the average temperatures. PNM said that a better measure would be Heating Degree Days. The following was their calculation.

A better measure of the amount of heating required for a home is Heating Degree-Days (HDD), which is calculated by day taking daily average temperature and comparing to a base of 65 degrees (It is assumed that if the average temp. for a given day = 65 degrees, that no heating is required for a home.

As an example: In Albuquerque on December 20, the average Daily Temp was 34 Deg. The heating Degree Days for that day = $65 - 34 = 26$ HDD

Attached is a file that summarizes HDD in Albuquerque by month.

Comparing HDD for Dec. 2008 to Dec 2007 gives us the following

Dec 2008 804 HDD

Dec 2007 870 HDD

Difference 66 HDD less in Dec 2008

In Pct 7.5% fewer HDD in Dec 2008

This indicates that weather conditions in Albuquerque were such that Dec. 2008 requires approximately 7.5% less Heating than in Dec. 2007.

We used 28 fewer therms in Dec 08 or about 28.5 percent less gas ($28 / 98 = 28.5\%$) in Dec 08. Subtract 7.5 percent for warmer weather, and we saved approximately 21 percent in Dec 08 by using GMX on our natural gas line. We didn't even turn the thermostat down while we were gone for Christmas. We probably would have saved more if we had turned it down for those six days.

In Jan 08 we used 96 therms of gas. In Jan 09 we used 60 therms of gas or 37.5% less gas than in Jan 08. HDD for Jan 08 were 966. HDD for Jan 09 were 747 or 22.2% fewer than in Jan 08. Subtract 22.2% for the warmer weather and we saved about 15.3% with GMX on our natural gas line.

In Feb 09 we used 21.9% less gas than in Feb 08 and we had 15.2% fewer HDD days. Subtract 15.2% from 21.9% and we saved about 6.7% with the GMX on our gas line.

Because we did not have any GMX units on our water heater and only one GMX unit on the dryer, the warmer it became, the less we saved. I'm convinced that if we had put GMX units on all of our gas lines, we would have showed more savings as the weather warmed up.

For the month of Jun 09 our gas usage was exactly the same as our usage in Jun 08. There were no GMX units on the water heater and only one on the gas dryer. Last week I put two GMX 400'S on the water heater but still have to add one more GMX 800 to the dryer flex line. We'll see what happens next month

Short Summary of Natural Gas Savings:

Dec 21%

Jan 15.3%

Feb 6.7%

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